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JULY/00

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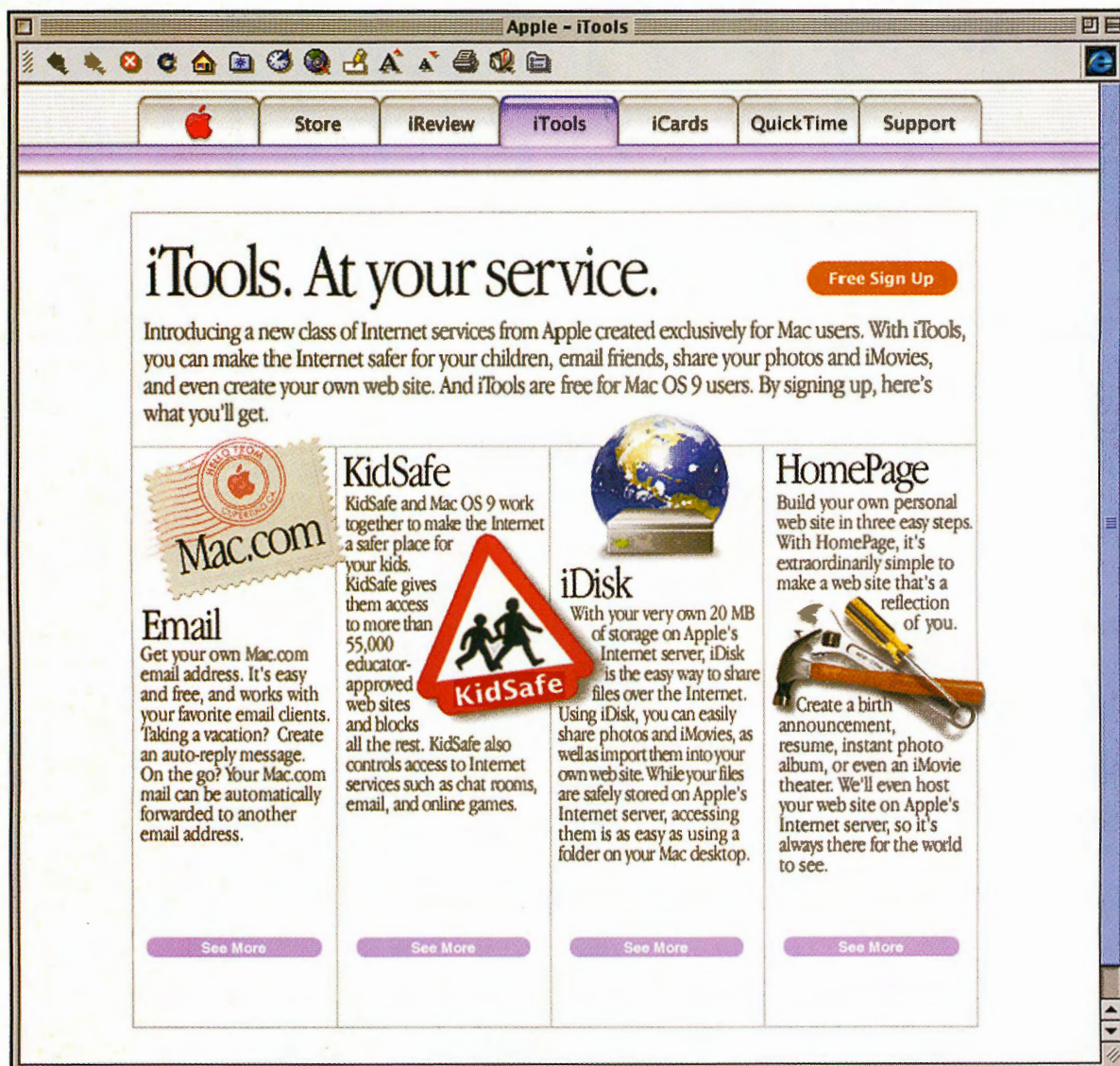
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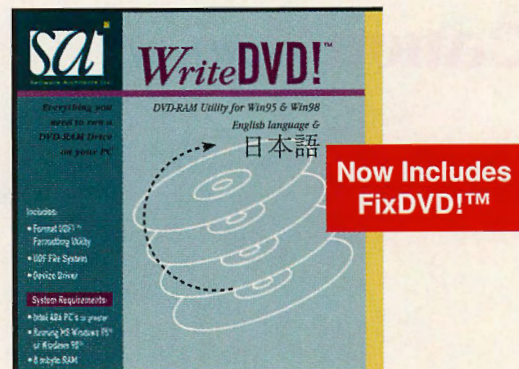
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JULY 2000

MacAddict

47

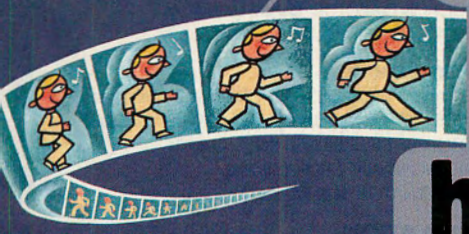
highlights

30 The MacAddict 2000-2001 Calendar

We racked our brains, we held secret meetings, we drank too many margaritas, and finally we came up with 365 days worth of Mac tricks, tips, projects, and Apple history. Here it is, all in a calendar format you can cut out and hang on your wall. You'll be so completely up to your ears in Mac facts, trivia, and activities you'll be fashionably booked for the whole next year.
BY CATHY LU, NARASU REBBAPRAGADA, AND DAVID REYNOLDS

46 Flash 101

If you're one of the lonely few who has yet to hurl yourself aboard the Flash bandwagon, now's your chance. We give you the lowdown on Flash and show you how to make a simple yet cool animation complete with interactivity, sound, and metamorphosing animals (don't ask). And best of all, we make it so easy that even your retarded pet hamster could do it—no exaggeration (well, maybe *just* a little). **BY JUDE HIGDON**



PLAY THAT FUNKY MUSIC,
Flash boy...

how to

78 Title Your Movies with FreeHand 9

FreeHand 9 sports just the features you need to add derivative, overdone title sequences to your QuickTime movies! We show you how to use them. **BY IAN SAMMIS**

84 Tap into App Switcher

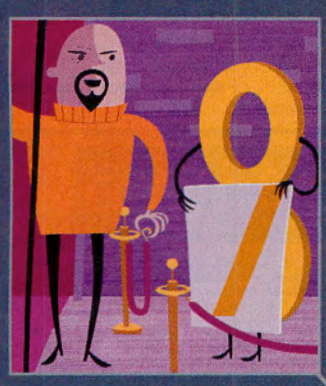
If you're not the sort who obsessively reads Apple's help documents, you might have entirely missed the Application Switcher, an almost totally hidden OS feature.
BY JONATHAN CLAYDON

88 House a Homeless Internal SCSI Device

Longtime Mac users often have piles of creaky, ancient external 5 1/4-inch SCSI hard drives. Here's how to turn one into a perfectly good case for a newer SCSI device!
BY DAVID REYNOLDS

90 Create an iDisk...Without Mac OS 9

Apple claims you need OS 9 to connect to an iDisk, but by performing some elective surgery you can finagle a connection with a considerably older system!
BY OWEN LINZMAYER



UH, HUH, BABY—nice stem.



WHEN NOT HARD at work, S. Britt, creator of the kooky art for our calendar feature, spends his free time searching for temple maidens in distress.

REPRINTS

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THE SKY IS FALLING! Oh, wait,
that's just a hatchet.



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every month

10 Editor's Note

Incoherent ramblings from the Editor in Chief.

14 Letters

Spunky readers speak out on today's hottest topics—like how much we rock.

28 Scrapbook

If you've ever wondered exactly how JPEG compression works, Ian Sammis has graciously taken the time to explain it all. Thank him on the way out with a few coins if you see fit.

20 Get Info

We give you a peek at graphics cards, Apple's billions, and the newer-if-not-necessarily-cooler Netscape 6. We also check back with Bungie, and give you the usual batch of tips, tech notes, and toys.

54 Reviews

Macromedia draws faster with FreeHand 9 (Sorry, Adobe). Umax's Powerlook 1100 scanner and Bellstor's CD-RW drive play with FireWire, while Orange Micro's PCI card adds the plucky bus to your older Mac. Graphics gurus look at Katabounga 3 and Pixels 3.6, and get organized with Cumulus 5. The jazPiper MP3 player goes Mac—plus HP's ScanJet, Maple 6, SoftWindows 98, and more.

76 Power Play

The rumors are true—we're still stuck on Unreal Tournament. That is, until the awesome-looking Deus Ex comes out—then all bets are off. For now we'll spill the beans on our favorite Capture-the-Flag level, Facing Worlds. Plus, get a glimpse at our latest stock of reader-supplied screen shots.

96 Ask Us

Want to grow up to be smart like us? Better bone up on your tech answers.

128 Shutdown

Microsoft's fortunes are fading, so we figure we'll kick 'em when they're down. We're good sports that way.

NOW THAT'S a Power Tower Pro!!

Welcome aboard, Chris—you're already our longest-lasting Associate Art Director in recent memory! Help! I'm leaning and I can't get up! Who wants to almost be a millionaire?

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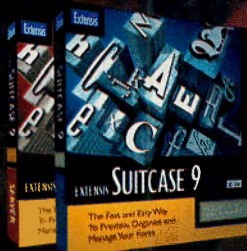
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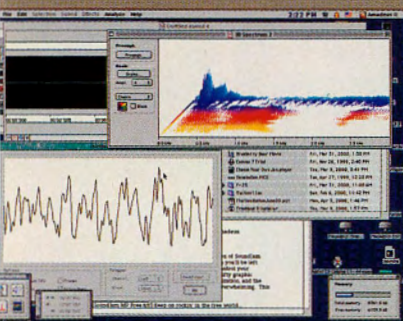
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PLEASE DON'T LET the little candies cry!

the disc



**Clear Your Calendar—
You'll Want to Spend Some
Serious Time with These Programs!**

highlights



WarBirds 2.75

After putting in a little time to figure out the controls on this heavy-duty flight sim, you'll be cruising the skies and having a blast in your choice of a WWII fighter or bomber. You can jump right into online multiplayer mode or first hone your skills in single-player mode (some practice before venturing into the thick of battle helps). Realistic game physics and limitless personalization will keep you coming back for more. You've had too much when you start humming "Over there, over there," as you dive-bomb other planes with names like Red Baron.



Amadeus 2.3

This program will enthrall you with a map of sounds you can generate through your microphone. Want to see a graph of your voice? Check it out in 3D with color-spectrum analysis, view a real-time oscilloscope, even add effects processing like echo or amplify. If the idea of exploring and tweaking an audio landscape appeals to you, this is your toy!



SoundJam MP Free 2.0.2

This program gives you the same options as the popular full version of SoundJam MP Plus for 14 days. After that it leaves you with a very cool player that has options of its own. Control your playlist and add new skins—it even comes with a nifty graphic equalizer. The endless configurations allow full customization, and the number of downloadable skins is almost overwhelming. This is some very swift audio software—check it out!



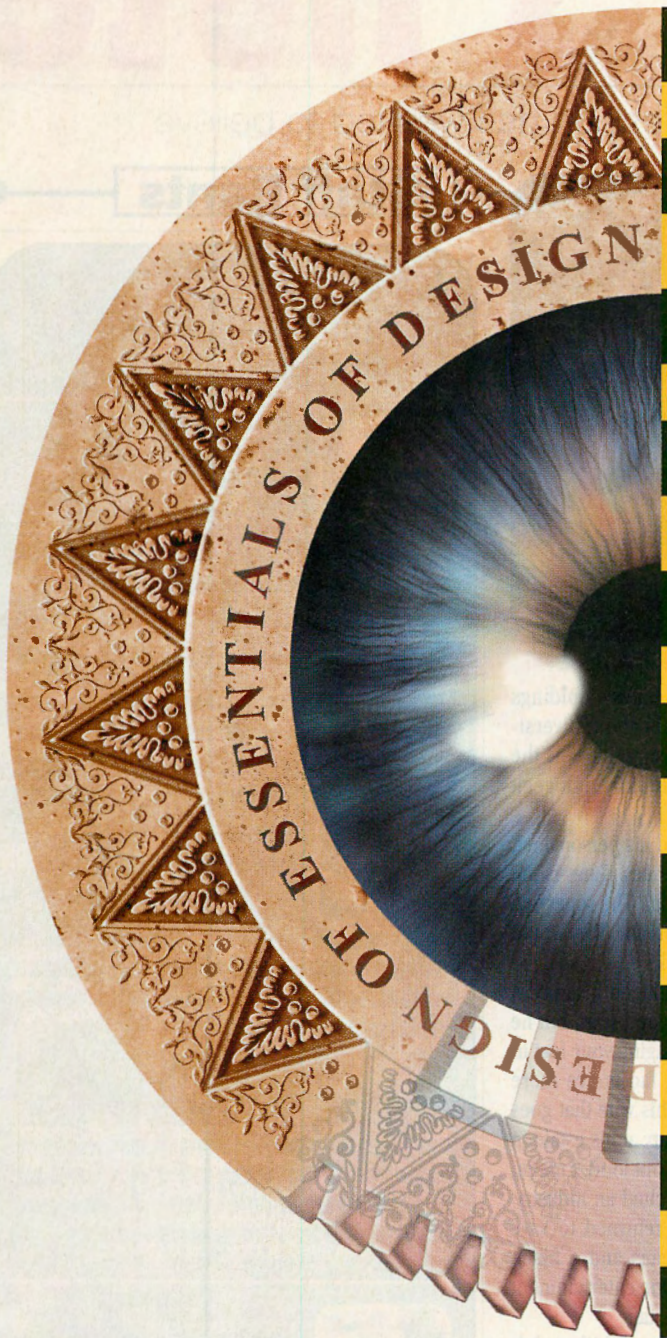
CandyCrisis 1.0

When a mad scientist's attempt at cloning goes terribly awry, you must help destroy the superfluous candies by lining them up four in a row. This is not your average Tetris-type game—a lot of attention has gone into the details. Did you ever really know why you had to match up all those shapes? Molecular instability, crazed scientists, and little candies that cry if their brethren don't join them in time—you've got to see this!



TAKE A TRIP with Ian into the deep recesses of the concept of drag. Find out what happens when a PC falls into the hands of the MacAddict staff. Not to mention a briefing of physics...all in this month's staff movie. Ian, put the system down! We know you don't like PCs—but don't drop it, we'd miss you around here. Ian?

Illustration never looked so good.



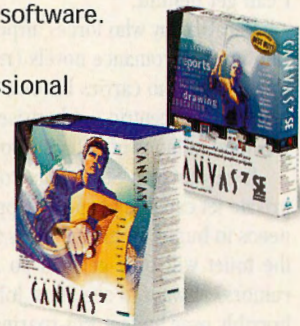
Eye-catching
illustration, isn't it?

And yes, despite the glistening
highlights, the realistic textures, the
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effects, this is a completely vector illustration.
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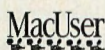


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editor's note

Journalism isn't as lucrative a profession as I was led to believe.

Geeks make terrible millionaires. I'm getting nauseous from all these stories popping up in the press about the problems tech folks face when they suddenly find themselves worth millions in our new economy. Unexpected wealth causes depression and stress in these people and often makes them feel estranged from their peers. It's pathetic. You never see these kinds of stories about rock stars—another group that's often endowed rapidly with buckets of cash at a young age. Rock stars know what to do with a sudden influx of wealth—they trash hotel rooms, date supermodels, suck down champagne with barbiturates, crash Ferraris...

I rejoiced upon reading that Larry Ellison's holdings in Oracle briefly surpassed the value of Bill Gates's holdings in Microsoft. If you look at it just right—forgetting pesky details about diversified investments—Ellison appears to be on the verge of surpassing Gates as the world's richest man. This is good news. Ellison is the kind of stupidly rich geek I can get behind.

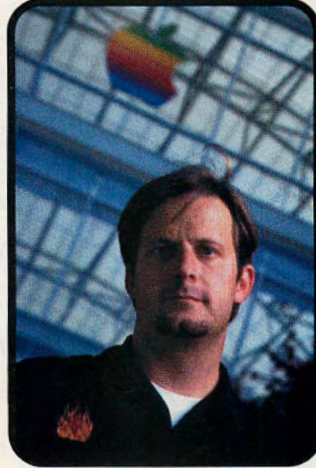
Here's a guy who forces airports to open for him so he can land his personal jet, who inspires romance novels (rumored), who wins deadly yacht races. Gates is the type of slob who carries his own luggage through the United terminal. The superrich need to be eccentric—otherwise they deprive us lowlifes of The Dream. Why would you want millions of dollars if you still had to work a 65-hour week?

Even our own Steve Jobs could benefit from some wealth-induced insanity. A private jet capable of speeds approaching the sound barrier is a good start, but he needs to bump up his madness a notch. Eating granola and massaging your feet in the toilet will only get you so far as an icon (and even those facets are mere rumors). I want to see Steve Jobs Island, a feature film starring his wife that goes horribly over budget, rip-roaring parties attended by Warren Beatty at his estate in Palo Alto. At least get a tailor, for crying out loud. I mean, the man exploited his best friend, launched an industry, got thrown out of his own company, returned to save it—and the best he can manage is jeans and a black turtleneck. I guess we can always rely for entertainment on his paranoia and random firings of staff.

I promise that if I ever make a million or a billion dollars in these Internet gold rush times, I will make being rich at least *seem* fun. I'll ride around on albino tigers and trick out Lexus sedans with hydraulics. I'll buy a small club and hire Kiss as the house band. I'll dress like Kid Rock and run for mayor of San Francisco. I'll give aspiring Internet millionaires something to long for. When you're trapped in a stuffy office with your Mac, working on some impossible deadline, you'll know why. Someday it'll be *your* turn.

Random Changes

While we're all waiting for my wealth to roll in, I'd like to tell you about a few happenings in the *MacAddict* offices. First off, you'll see some new faces in our ranks. Since my last staff update, we have taken on a new associate art director named Chris Imlay and a new online content editor named Rich Pizor. I welcome both of them to our staff, and promise not to forget their names after I'm famous.



NEIL DIAMOND is haunting my head.

Staff Rants

Until Imagine Media lets our editors fight gladiator style, I'll just have to entertain you by asking them pesky questions.



Cathy Lu

Senior Editor, Liar and Cheat

Q. What would you do with a billion dollars?

A. I would buy the country of Malta and open up a safari filled with exotic monkeys and cats.

Q. Who is your favorite rich person?

A. My favorite rich person is Tiger Woods because he can do cool things with a golf club and a ball. And I don't mean that in a sick way.



Chris Imlay

Associate Art Director du Jour

Q. What would you do with a billion dollars?

A. I'd purchase all of the available commercial airtime during the next few Super Bowls and show nothing but selections from *La Cage Aux Folles* in French without subtitles.

Q. Who is your favorite rich person?

A. I'm fascinated by that rarefied class of rich person who has vast amounts of plastic surgery, keeps rare animals, and lives in a bloated mansion with a fantasy-based name. Michael Jackson and Siegfried & Roy come to mind.



David Reynolds

Executive Editor (Alcohol, Lunch)

Q. What would you do with a billion dollars?

A. I'd give it all up for just a little more. Wait—I'd buy the rights to *The Simpsons* so I could rip it off without giving anyone credit.

Q. Who is your favorite rich person?

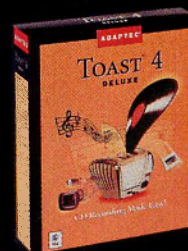
A. My favorite rich person is Thurston Howell III. He had the foresight to bring millions of dollars on a three-hour boat tour, and he actually used it to bribe others stranded on a desert island, where it was essentially worthless.

Ellison is the kind of stupidly rich geek I can get behind.

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"I've been a Mac user since the beginning. When I caught my son using Microsoft® Internet Explorer 5, I accused him of abandoning the faith. Then I tried it. I'm overcoming the guilt much faster than expected."

The secret lives of Mac users and Microsoft products*

confession #

054

* Mac fanatics portrayed are fictitious, but based on real-life raves of Internet Explorer users.



name: "Joe"

age: 55

hobbies: Movies

Fly-fishing

'68 GTO convertible



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Microsoft



letters

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This Month

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THE REVOLUTION IS AT HAND

It was an average day a few weeks ago—that is until I checked my email and saw the message thousands of us have been waiting for...There in my in-box I read the subject, "The time is now!" from Apple Computer. I was stunned—was this the call to arms that loyal Mac addicts have been waiting for? Who should I strike first? My PeeCee-using friends, or a local PC office in a final attempt to place Apple in its rightful position as the leader of the computer industry? I opened the email to



TALK TO US
and other
Mac addicts
at <http://www.macaddict.com/debate>.

RECENTLY SIGHTED

I recently took a trip to Washington, D.C. with my daughter. While we were there, we visited the Smithsonian's Museum of American History. At the museum there was a whole section dedicated to the "Information Age." Believe it or not, this exhibit contained what can only be described as a Mac shrine! It contained a Mac Classic, an Apple II, and an Apple I. I thought of all of the other Mac addicts out there, and knew I needed to share this picture with them.—RYAN SCHWIEBERT



ALL HAIL, General Maximus!

check for any further instructions on specific targets and meeting places for our rebel uprising only to read that now I can get Mac OS 9 for 20 bucks less. Oh well, maybe I'll strike Mac Fear into my PeeCee friends anyway.—JOSH HILLIARD

QUIET, YOU, OR THEY'LL STOP MAKING POWERPOINT!

I think that, in your desire to encourage Microsoft to develop for the Mac platform, you give short shrift to some of the greatest Mac programs ever. Personally, I feel that WordPerfect for the Mac is one of the greatest, most elegant programs on any platform. I own and use Word 98 but it's a dog and a kludge compared to WordPerfect—plus, WordPerfect is available for free and runs well on just about any hardware. You should be campaigning to get Corel to sell it off or update it so the platform could benefit from this terrific alternative.

I have Eudora Pro 4.2 and Outlook Express 5. Yes, the Eudora user interface is awkward, but again the program runs fast

on older hardware. Bloating OE requires a much faster processor and three times the memory, but still fails to do useful things that Eudora does easily.

Encourage Microsoft if you like, but do your readers a favor and don't forget to tell them about some superior alternatives.

—BOB HAMMERSLAG

CRIME DOESN'T PAY—UNLESS YOU'RE MICROSOFT

We just got burgled. Nine good Macs in the place, and a hacked up IBM Aptiva 133. They took the Aptiva—good for them. We'll use the insurance to buy another burglar-proof G4—they're obviously safer.

—MIKE EMMETT

I had to do it. Microsoft is suing a local software company for illegally copying its software. On the local news a Microsoft representative gave out a 1-800 number to report instances of piracy.

So, I called it and told them I wanted to report a rather large case of piracy. When they eagerly asked what it was, I informed them that 90 percent of the PCs in the world are using pirated versions of the Macintosh operating system.

The funny part is that they didn't simply hang up on me. They insisted someone was paying me to make the call.—BRIAN DUFFY

DON'T CALL IT A COMEBACK...

I just wanted to give many thanks to all at MacAddict for performing the Product Slugfest (May/00, p26). The article is useful in many ways. First, of course, is the obvious information value. Another reason is that the burden of competence falls upon the developers and manufacturers when their products are compared with that of the competition. I was simply compelled to give you all a big thumbs-up. Thanks. Keep 'em sweating and keep up the good work.

—GREGORY AVILES



A GET WELL iCard from reader Luke Uecker.

IT TOOK FOUR OF US TO HOLD HER DOWN

Don't think for a minute that anyone believes Cathy [Lu] is really playing Toy Story 2. You guys know that you duct-taped her to a wall and wrote that she played it because she kicks your arse every time you fire up Unreal Tournament! The frag queen from hell is well known in the UT community.—STEPHEN M. SMEATON

WE'RE WAITING FOR A LENTIL SKIN

Great Mag! In the May 2000 issue, you had a screen shot from Unreal Tournament depicting the demise of a Lego cowboy. Where did you get that skin? And what is it called? I *need* that skin! It rocks!

—EDGAR EBALO

Get a wide range of Unreal skins at <http://unreality.org/painfuldetail>—RC

THEY'LL HAVE YOUR JOB SOON

After reading the April 2000 issue of *MacAddict*, I am appalled at what I have read. You see, I am the System Operator for middle school grades six to eight, and I see this kind of stuff everyday. I go through the aggravation of fixing the mess "these little angels" have created. My question to you is: Who do you think you are? And you people call yourselves journalists! Ha! Maybe if you went around and corrected "this little joke," as you call it, a few hundred times you would be phrasing things a little differently. I realize you are trying to sell magazines, but give me a break. My only hope for you is that you spend 100 lunch duty hours in the middle of a food fight for every computer that, because of your magazine, a child has messed up.—MICHELLE BULLOCK

We're not sure, but we think Michelle is referring to either Hack Your Mac 2000 or April Fools' Pranks from the April issue of *MacAddict*.—RC

THAT'S NOT GOING TO CHANGE OUR MINDS

Hey! I resent your comment that those of us lucky enough to be in Honolulu are jerks, just because the weather here happens to be sunny ("Shareware Pick of the Month" (Earth Browser, Apr/00, p18)). As a matter of fact, I'm going to run my copy of Earth Browser right now, just to see how cold it is in California!

Aloha from Hawaii...where it's warm!!!—BENJAMIN WEAVER

FLANDERS WAS A ZOMBIE?

Hey, let's make a clan on Battle.net called the Apple Avengers or something and go on an all out virtual killing spree in the name of the holy Macintosh! Mwahahahaha.

—DUSTIN LOCKWOOD

You heard the man, log onto <http://www.battle.net> and get going.—RC

LIKE, TOTALLY?

You guys so rock...I agree 100 percent with your decision on the comparison of Unreal Tourney vs. Quake III. And the extending Unreal article was very helpful. However, you guys mentioned Unrealintosh—which (IMHO) is severely lacking in the updates department—and missed UT Center, which has a section just for Mac Users (<http://www.utcenter.com/mac>). UT Center is way better than Unrealintosh. I hope you guys issue some sort of correction or addendum or something in next month's issue.

—J. "MAELSTROM" DUFF

FROM THE LUCAS RANCH...

As the project lead and lead programmer for Star Wars: Racer for the Mac, I'd like to say thanks for the excellent review your magazine gave our product, and also offer one correction.

We're very glad you liked the game, and hope your readers do, too. A lot of effort went into that particular project here at LucasArts, and we're extremely proud of it.

Now, the correction. In the end of the review, you state:

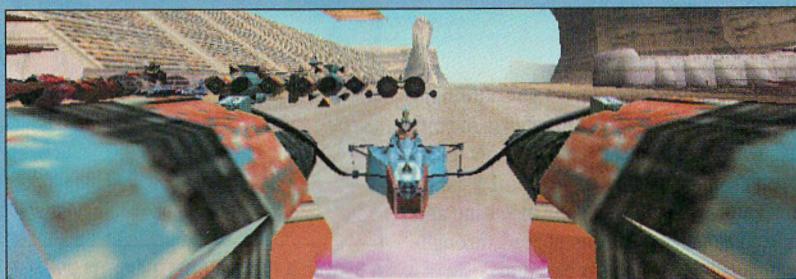
"The one major downside to Racer is that it is incompatible with pretty much all 3dfx hardware. The developers at LucasArts wrote the game to look for ATI's OpenGL implementation. It won't run at all if it finds Voodoo2 or Voodoo3 OpenGL extensions."

This is absolutely not true. In fact, we made great efforts to ensure that the game would run very well with the latest version

of the 3dfx drivers, as well as any other hardware that supports OpenGL fully. There is helpful information on the 3dfx Web site for Voodoo owners who still have the old beta drivers.

As this is the "only major downside" to the game, a printed correction would be greatly appreciated by those who worked hard to make sure that this game could be enjoyed by as many Mac users as possible.—ERIC JOHNSTON, LUCASARTS ENTERTAINMENT COMPANY

We re-tested the original Racer 1.0 reviewed in the April 2000 issue (p56) on a G4 with a 3dfx Voodoo3 3000 PCI graphics card installed. We never even saw the startup screen. LucasArts has since released a patch in early February (just after press time) which allows compatibility with 3dfx cards. The Star Wars: Episode I Racer v.1.01 patch is available at <http://support.lucasarts.com>.—Ed.



THIS IS EXACTLY WHAT Mothers Against Drunk Podracing was designed to stop!

WE CAN'T COUNT VERY WELL

What is with you guys? Are you obsessed with the numbers 20 & 104? It's crazy. Almost every issue ends on page 104. I dare you to end it on 106. The number 20 is also a problem. 20 tips; 20 programs; 20 things to do in 20 minutes. When is the craziness going to stop? Is there a problem with numbers 19 and 21?—STEPHEN SWIFT

HOW ABOUT SOMETHING ON FAKECOMPLEX

Just a note to let you know how much I enjoyed the REALbasic how-to in the May 2000 issue. What a treat! I've just starting learning the language, and articles like that one really help show the capabilities of REALbasic. I hope you'll continue to consider similar articles for your magazine to serve the growing niche of Rb users.—BRIAN HESS

DOUBLE YOUR PLEASURE

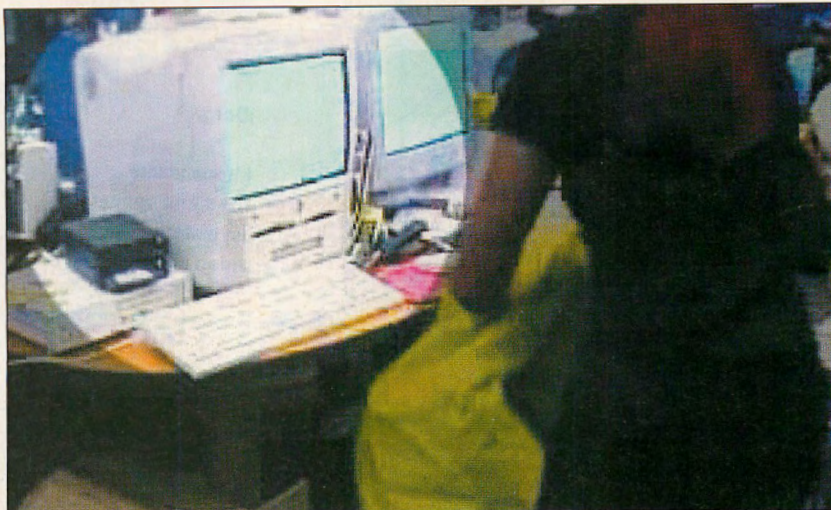
Hey ho, *MacAddict* people! In your most recent magazine, you compared Unreal and Quake III, and Unreal won. I have to agree with your decision, but when I first was presented with the choice, I couldn't decide between the two. So, I got both! After three sleepless nights and about twenty espressos, I finally beat the last level of Unreal, and collapsed on the floor in a quivering heap. I was the first in my area to beat both, earning me everlasting fame. Now, back to my endless search for a life...—WILL GRAHAM

DIDN'T YOU KNOW? LOSING MONEY IS CHIC

Some may feel the excitement over the new Mac lineup, but I'm still pissed off. I bought my machine in February only to have Apple release a faster running machine within a month—a loss of over \$800. Is this Moore's Law in overdrive or is it what they mean by vintage?—CHRISTOPHER WHEELER

BLECHBERRY

I really appreciate how you thought Tangerine was better than Blueberry in your May 2000 issue. Blueberry is only good when you *have* to buy it—a non-DV iMac, for example. I really like your magazine and the humorous little blurbs spread throughout it. Way to go!—ADRIAN BELLOMO



NO. YOU ARE NOW FEELING SLEEPY...

Last week, I was in a convenience store whose name starts with "AM" and ends with "PM." A worker in the store asked me what, as a customer, I thought of her meticulous arrangement of a shelf containing cookies and candy. I immediately put both thumbs up and said, "Spiffy!" Have I been brainwashed?—JIM WELDON

IT'S THE TOOTHINTOSH

I was wondering what Mac is in the background of your Staff Video on the April 2000 Disc (see attached picture, right). It looks like some kind of iMac bastard child.

—JOSHUA TURNER

That, Josh, is a Power Mac G3 all-in-one, which came out at the same time as the original beige G3s. It was offered for a limited time, and to education users only.—RC

WHAT A DISCOVERY!

If you think that Coppola looks like Wozniak, think about Michael Holigan from the show *Your New House* on The Discovery Channel—now *he* looks like Wozniak.

—MICHAEL GREIFENKAMP

THIS MILD-MANNERED iMac was accidentally exposed to massive amounts of gamma-ray radiation...

YOU KNOW YOU'RE A MAC ADDICT WHEN...

...you're taking a history test and you wish you had a Memory control panel.—ANDREW TODD

...your answering machine says "leave a message after the eep."
—ROB LINEWEAVER and KELLY HEDRICK

...you spend hours trying to discover what PC really stands for: Piece of Crap, Pain Causer, Problem Creator, Physically Conspicuous, Painfully Corrupted, Power Constrictor, Perpetually Crashes, Particularly Complicated, Partial Computer, Produces Cussing, Provides Conflicts, Profusely Corded, Permanently Concerning, or Production Curtailor?
—MICHAEL LOVINGER

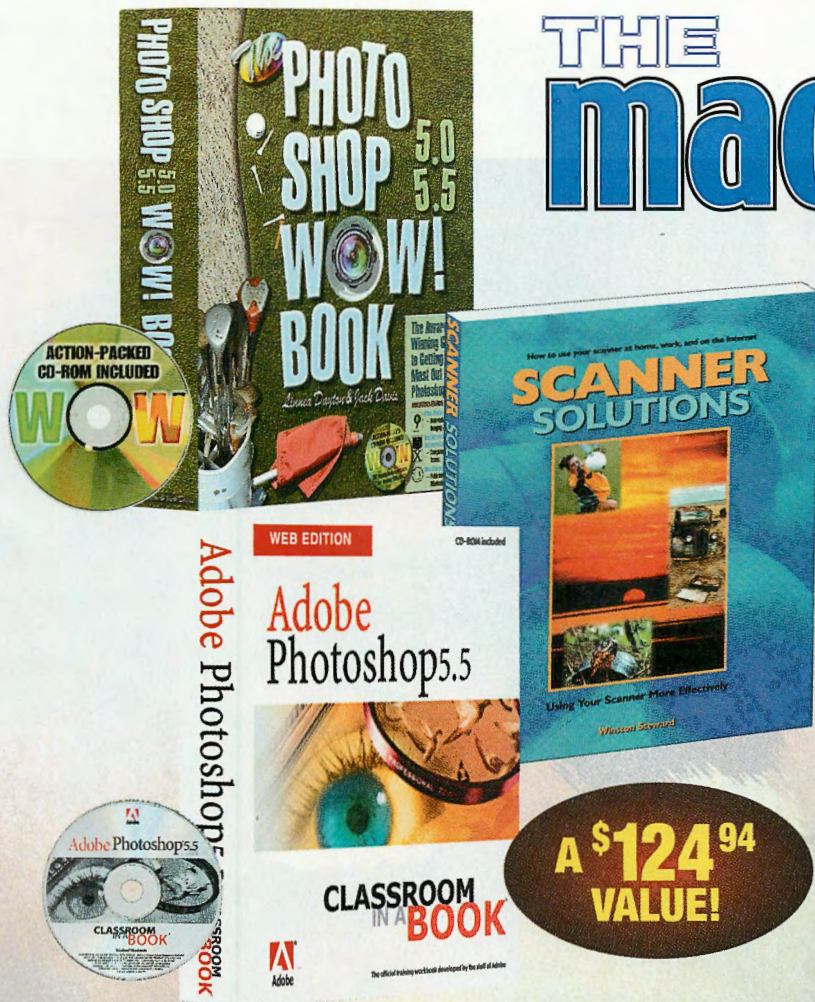
...all you see are X-rated movies in anticipation of Mac OS X.—ANONYMOUS



A BEARD, A PART, A BREED APART! Wozniak, Coppola, and Holigan.

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MacAddict 7/00 N931/YS354/04



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*Estimated U.S. retail price





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Keeping the letters away from the features since 1996.

Voodoo Versus Radeon

Two high-end graphics chips vie for the Mac audience

Although it may seem like some kind of wonderful dream, there's no need to break any capillaries pinching yourself, because it's true: Two graphics board companies are planning hot new chips for the Mac market. Graphics stalwart ATI (<http://www.atitech.com>) and Mac newcomer 3dfx (<http://www.3dfx.com>) both announced new chip technologies in mid-April. Coming to a Mac near you, they're going to rock your world like an all-night bowling alley—*especially* if you happen to play a lot of games.

ATI on the Spot

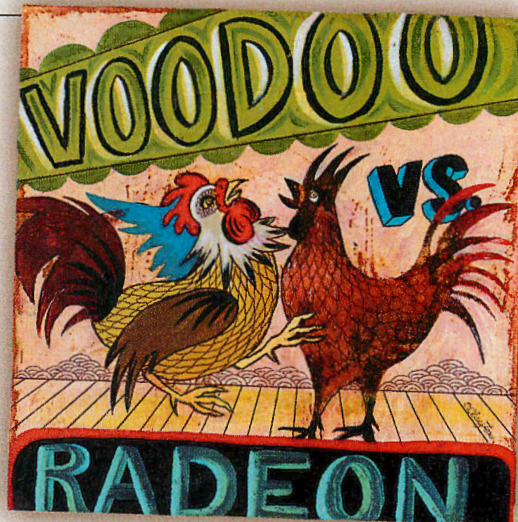
In late May, ATI Technologies announced the Radeon 256 graphics chip, the successor to the powerful Rage 128 chip that debuted nearly two years ago. The Radeon chip is a marvel to behold. Aside from offering incredible speed and the ability to address up to 128MB of video memory, it can run games in 32-bit color with no performance hit, and has hardware-assisted 3D effects and HDTV-decoding support. The Radeon 256 can throw data around at a rate of 6.4 *gigabytes* per second and two Radeon 256 chips can work together on the same graphics card for some truly spectacular graphics effects.

ATI intends to ship products based on the Radeon 256 this summer, and although it hasn't announced a specific Macintosh product, you can bet that's in the works. ATI has been supplying Apple with graphics chips for many years now, so there's no reason to think the Radeon won't be the chip of choice for new Macs as soon as ATI makes it available.

3dfx Come Lately

Although 3dfx is a newcomer to the Mac market, it's been around for years on the PC side. We've even seen a few products based on 3dfx chips make it over to the Mac from time to time, and 3dfx has posted beta reference drivers on its Web site that let you use any PC-based 3dfx cards with your Mac.

This situation is about to improve radically with the introduction of Mac-specific versions of two products: the Voodoo4 4500 and the Voodoo5 5500. Although 3dfx hasn't announced a definite ship date for these cards, you'll find them worth the wait—they will support all the major graphics APIs, including OpenGL, RAVE, and Glide. 3dfx plans to offer them



WHY DID THE VOODOO CHICKEN cross the road? To kick the Radeon chicken's butt.

ILLUSTRATION BY CHRISTIAN CLAYTON

with 32MB of video RAM for the 4500 and 64MB for the 5500.

The Voodoo4 4500 uses one VSA-100 graphics chip to power the card, while the Voodoo5 uses two VSA-100 chips working in tandem for your pixel pleasure. Just as a technical aside, the VSA-100 chip can work in conjunction with up to three other VSA-100 chips, making for a multiprocessor graphics card that packs a serious wallop. ATI's Radeon technology, on the other hand, is limited to just two chips working together.—DR

Let the Battle Begin | Here's a look at how the technology behind these boards stacks up.

	3dfx VSA-100	ATI Radeon 256
Memory	64MB	128MB
Number of processors on a card	1 to 4	1 to 2
Textures per pixel per rendering pass	2	3
API support	Glide, OpenGL, RAVE	OpenGL, RAVE
AGP support	4X	4X
OS support	Windows, Mac OS, Linux, BeOS	Windows, Linux, Mac OS
Mac OS X support	Planned	A very good bet
Other special effects	Antialiasing, motion blur	Antialiasing, HDTV support, 32-bit color with no performance hit

More Money for Apple

Another day, another \$2.5 million

On April 19, Apple announced margins reaching an astonishing 28 percent, profits of \$233 million, and revenues up 27 percent to \$1.94 billion for its fiscal second quarter—the company's strongest second quarter in its history. In the wake of

these strong results, Apple plans to offer a two-for-one stock split that will double every share on the 21st of June. We dug through Apple's latest numbers for some interesting tidbits, and here's what we found.—*IS*

The MacAddict Index

Where Did Apple Spend Money?

- Research and development:
\$92 million, up 21 percent from last year
- Provision for income taxes:
\$86 million, up 478 percent from last year (the price of success!)
- Provision for CEO aircraft:
\$0 million (far below last quarter's roughly \$45 million)

Apple's Inexhaustible Money Supply

- Apple's gain from sale of investment:
\$100 million, up 82 percent from last year
- Apple's short-term investments:
\$1.947 billion, up 24 percent from last year
- Fraction of Apple's profit made from actually selling computers and software:
72 percent (up from 69 percent last year)

Don't Blink!

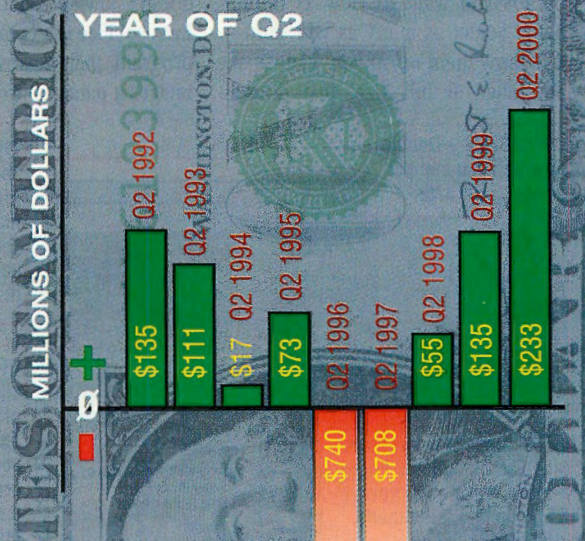
- Unit sales:
1,043 thousand, up 26 percent from last year
- Rate of unit sales:
7.53 per minute
- Rate at which a person blinks while reading:
Three to eight times per minute

Apple Airways?

- Apple's total assets:
\$7.007 billion
- Fleet of Boeing 757-200 aircraft that sum would buy:
101
- Size of United's 757 fleet:
98

Apple's Second Quarters

Apple has traditionally done poorly in its second quarters (January through March). Its traditional dependence on educational sales usually leaves it with below-average sales in winter, midway through the school year in most countries. Its new consumer push, however, has altered the usual trend—Apple's getting four decent quarters these days. Here's a look back at second quarters of the past.



Oni and Halo

Bungie almost got game

Bungie Software has left us hanging. It's been about a year and half since the venerable Mac game developer released Myth II and more than a year since it started us drooling over Oni and Halo, two games we hope will transform the gaming world.

The wait is almost over for Oni, Bungie Software's highly anticipated third-person shooter. Bungie said it expects to publish Mac and PC versions of the game together just as Rockstar Games releases the PlayStation2 version this fall. Of course, this promise is plainly déjà vu.

Bungie won the hearts of Mac gamers everywhere when it released Marathon, one of the original first-person shooters for the Mac. Marathon one-upped Doom and knocked those gloating PC gamers off their multiple-mouse-button pedestal (at least momentarily).

Oni should continue this tradition. Inspired by Japanese anime, Oni stars a female cop named Konoko, whose mission is to defeat the Kage crime syndicate. Unlike many third-person shooters, where *out of ammo* means *out of luck*, Oni combines gunplay with martial arts (think *The Matrix*). In fact, according to Bungie, at certain moments during play you'll find hand-to-hand combat preferable.

For Halo, we'll have to wait a bit longer. Bungie still hasn't



TWO GUNNERS and a driver—now that's team play!

announced a ship date for this much-anticipated sci-fi action game. While Oni is the first baby of Bungie's West Coast team, Halo comes straight from the tried-and-true group led by Jason Jones, who brought us such gems as Marathon and Myth. Halo rocked our world last year at Macworld Expo when Bungie previewed its gaming engine. The graphics looked awesome, resembling a rendered movie. Halo may possess the most beauty we've ever seen in a Mac game.

Halo is a combination of shooting and strategy. As you play the game, the story unfolds based on your actions. The name refers to the ring-shaped world where humans battle aliens with orbital swords, guns, tanks, and a multitude of other weapons. For multiplayer action, coordination with teammates is key—particularly when you're using the many vehicles that have mounted weaponry.

If Bungie delivers, get ready for some unprecedented Mac gaming. Heck, get ready from some of the best gaming you've ever seen on *any* platform. Strangely enough, your mom was right—patience is a virtue, and good things do come to those who wait.—*NR*

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Shareware Pick of the Month

iSee

PRICE: \$10

URL: <http://azinesw.macos.net/isee.html>

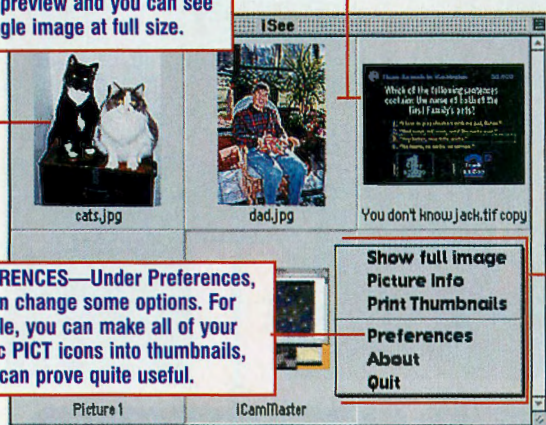
This simple little image preview tool lets you look at images without enduring the wince-inducing process of opening up Photoshop or another slow-loading graphics program every time you want to identify a picture. Simply open iSee (it takes about half a second) and select the photos you want to view as thumbnails. Select as many as you want—it'll show them *all*. If you want to see an image at full size, just double-

click it—poof, it shows up without devouring too much valuable RAM. (We threw 40 thumbnails at iSee with no trouble—we did have to bump up the application's memory allocation a bit to view an image at full size). You can also print the thumbnails, although inexplicably the program doesn't always print all the images. Even so, iSee is a completely utilitarian program that makes sifting through images a painless process.—CL



FIND ISEE on
The Disc.

INDIVIDUAL PICTURES—Double-click a preview and you can see any single image at full size.



PREFERENCES—Under Preferences, you can change some options. For example, you can make all of your generic PICT icons into thumbnails, which can prove quite useful.

THUMBNAILS—You can select pretty much as many images as your screen will hold. Go ahead, try it. We dare you.

OPTIONS—Control-click to get this list of options. Print Thumbnails is cool, albeit a little bratty—sometimes it doesn't print *all* the images. But who's counting?

Droolworthy

ZephIR

ZephIR

<http://www.thezephir.com>, \$74.75



At last—a way for your Mac to tell your A/V equipment what to do.

The ZephIR is an ADB-based infrared emitter that can control just about any device with an infrared remote port—including TVs, CD players, DSS systems, and the like. Just connect the ZephIR to your Mac and use one of the virtual remotes.

The ZephIR can learn new codes for remotes not included with your device, so you should be able to tweak the controls accordingly. Got USB? The ZephIR works well with the Griffin iMate USB-to-ADB adapter.—DR

STANDING SENTINEL by your AV equipment, the ZephIR exercises infrared control over every component.

PHOTO COURTESY OF ZEPHIR



Pets.com Versus Robert Smigel

Because Pets Can't File Lawsuits

Proving that even sock-puppet dogs get their day in court, Pets.com filed suit on April 12 against Robert Smigel, creator of Triumph the Insult Comic Dog that has appeared for the past several years on NBC's *Late Night with Conan O'Brien*. The suit alleges defamation and trade libel, and requests a declaratory judgment that the Pets.com sock puppet doesn't infringe on Smigel's copyrights.

According to the complaint, the doll duel started when Smigel sent a letter to

Pets.com, alleging that the sock puppet infringed on Smigel's Triumph copyrights and threatening legal action. Smigel then appeared on Comedy Central's *The Daily Show* and the syndicated *Inside Edition*, claiming that a "controversy" existed due to the similarity of the two characters. Pets.com, not wanting to associate its friendlier puppet with the somewhat vulgar Triumph, filed a three-part complaint in the U.S. District Court for the Northern District of California. Beyond the declaratory judgement, the lawsuit seeks damages and court costs. We were unable to reach Robert Smigel for comment.—IS

Looking Back...

Three Years Ago

"Everybody says that Mac sales are in the catalogs. That's really not true. You can't just be in the catalogs and profit and stay in business. Not to be in retail is awful."

—Jeanine DeSocio, president of now-defunct Changeling Software, in an interview with then-Associate Editor Kathy Tafel



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Hard Disk ToolKit® 4.0 is one upgrade with a lot of moxie. Don't pass it by!

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Take a spin on over to **www.fwb.com** for the full scoop on Hard Disk ToolKit 4.0, or to download your upgrade for **just \$49.95**. While you're there, be sure check out the rest of the FWB classics.



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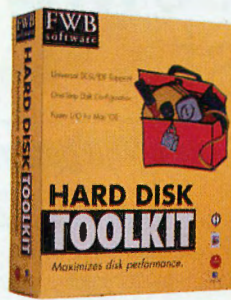
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Buying Tracks

Sony's PC only, but BMG will sell us a song

Unless you're craving that life-size Christina Aguilera poster down at Tower Records, you can just stay home and download her music online—legally this time. Sony Music Entertainment and BMG Entertainment have both announced grand plans to begin selling music through a variety of online retailers. Sony expects to start selling digital downloads in May, and BMG announced a start sometime in mid-June. The real question is whether any of the music will be worth buying.

Hardened and embittered by the online music saga, we know only too well that selling music over the Web is anything but straightforward. The usual intricacies surrounding platform, audio format, copyright security, and bandwidth always complicate matters.

Let's start with audio format. Sony Music Entertainment will start by releasing PC-only tracks using its ATRAC3 format for playback on Microsoft's Windows Media Player. Why PC only? Because Windows Media Player requires an ATRAC3 plug-in to play Sony music. The current beta version of Windows Media Player for Mac can't read Sony ATRAC3 music, and Microsoft has no plans to push it to full-fledged product. According to Sony spokespeople, you can't legally burn the track to CD or listen to it on any portable device that isn't SDMI (Secure Digital Music Initiative) compliant. Big help.

Conversely, BMG Entertainment, in conjunction with Liquid Audio, is releasing formats available for the Mac playable via Liquid Audio's Liquid Player. Liquid Audio is currently encoding music in a variety of formats. What format you can download from what retailer remains undetermined. Options will surely be slimmer for Mac users. According to Liquid Audio, users can burn its tracks onto CD, but it's up to the content owner (the recording company) to decide whether this is legal.



ILLUSTRATION BY CHRISTIAN CLAYTON

CHEAP, CHEAP: You must pay for our digital music now.

Right now, you can only download selected tracks from an artist's CD. Downloading a whole CD will be tough unless you have DSL and a lunch hour. A Liquid Audio spokesperson estimated an entire David Bowie album download at about 45 minutes. The price of a track will be close to that of a CD single. Sony plans to price its music at \$2.49 per download.

Commercial digital downloads add up to big hype and big restrictions. But for those Britney Spears cravings that don't warrant purchasing an entire album, it could be the way to go. And in the privacy of your own home, the shopping experience is much less embarrassing.—NR

D'oh!!!!

Self-Inflicted wounds in the Slugfest

In MacAddict's May 2000 issue, we pitted a number of products in a series of slugfests. The products came out swinging—and we went down for the count a couple of times ourselves.

On page 28 we put Norton Utilities and TechTool Pro in the ring. We incorrectly said that Norton can destroy the system's file structure if a power failure occurs during optimization. Actually, Norton cleverly ensures that the file structure always remains valid, so you won't lose any data even in the event of a power failure. The mistake does not affect our decision—we still find TechTool's memory validation tests more useful than Norton's benchmark tools.

Our other mistake came on the facing page, where we pitted Palm and Handspring against each other. We said you can't download email from your Mac to a Handspring Visor without purchasing a third-party conduit such as Actual Software's MultiMail Conduit (<http://www.actualsoft.com>, \$29.95 SRP), implying that the Palm handhelds don't have this problem. This is incorrect. Both the Handspring and the Palm devices require a third-party conduit to receive email from your desktop. Again, the outcome remains the same: Palm has the edge because of its more diverse range of products.

We apologize for the misinformation. Shout-outs go out to all the loyal readers who pointed out the errors most vocally. Really, thanks.—IS & NR

10.9.8.7.6.5.4.3.2.1...

Countdown Contest



Ring in the New Year and get on The Disc!

Okay, REALbasic fans—here's your chance to show the world your stuff. On The Disc this month you'll find a cheesy little program called New Year Countdown that counts the seconds until New Year's Day. The program needs some sprucing up, though—as is it's just slightly more interesting than watching a massive multifile copy under Windows. We've put the source code on The Disc as well—use it to make a cool, feature-filled countdown, and send your countdown to isammis@macaddict.com! Mark the subject line "REALbasic Contest." We'll put the three coolest entries that we receive by August 31, 2000 on the December 2000 Disc, so that the Mac-Addicted everywhere can ring in 2001 in style.—IS



**FIND THE
COUNTDOWN
PROGRAM
and it's
REALbasic
code on
The Disc.**

get info

Dr. Netscape and Mr. Mozilla

Netscape AOL-ifies Navigator in preview version

For those who can't stomach the thought of installing Microsoft's Internet Explorer on their Macs, Netscape's Web browsers have always provided an alternative. Lately, though, Netscape's been falling behind a bit when it comes to browsers—IE has had Windows version 5.5 for a while now, and even the Mac version is at 5.

To remedy this, Netscape released a preview version of Navigator 6—skipping over the open-source Mozilla 5 altogether, but using Mozilla's rendering engine. Netscape combined this with an application written in a bizarre, fashion that takes every opportunity to trade speed and Mac-like behavior for ease of porting. All this means Netscape 6 takes a long time to launch, and the interface feels more like a Web page (or a Windows program) than a Macintosh application. Widgets such as buttons, text fields, and scroll bars don't look or act like their Mac counterparts.

Netscape has added its version of personality to Navigator's interface in the same way that Apple perked up QuickTime and Sherlock—with a bunch of nonstandard colored buttons. This version also includes a feature called My Sidebar, which looks and acts suspiciously like the pullout pane in Internet Explorer 4.5. Once you get past the interface, though, and take a look at the actual contents of a Web page as Netscape 6 renders, you'll find the results pretty nifty—everything works as you might expect, and the speed is especially impressive for a program that's not even in beta yet. If you want to try it out for yourself, download the preview release from <http://www.netscape.com>.—DR



LOOKS LIKE THE PLATINUM VIRUS infected Navigator 6 and removed all vestiges of the Mac-style interface—the latest version is basically a hollow turquoise shell. Version 6 bears a suspicious resemblance to Netscape's Netcenter home page.

IE and OE Ahas

Two tips to make Explorer and Express work better than ever

Although the latest versions of Microsoft's Mac Internet applications are great pieces of software, you *will* have to deal with a couple of annoyances when using them. These two tips will save time and avert frustration.

- To make Internet Explorer select only empty text fields when you press the Tab key (leaving out links), hold down the Option key while tabbing.
- To force Outlook Express to rebuild its message database (it's a good idea to do this every few months), hold down the Option key while launching the program. Outlook will ask if you want to rebuild the database—say yes. Why is this important? Outlook Express doesn't free up space when you delete messages and attachments—you have to rebuild the database to do that.—DR

Apple Frees iMovie

These days they're just giving it away

Attention, amateur movie moguls—Apple is giving away iMovie, the low-end video editing package previously available only as part of the iMac DV software bundle. On April 28, Apple announced that you can now download iMovie from its Web site at <http://www.apple.com/imovie>. Folks who want an actual disk can call 800-293-6617 and order one for \$19.99. The release ends months of speculation about the low-end video production tool, which lets owners of FireWire-enabled Macs easily download video clips from their DV cameras; add transitions, titling effects, and music; and either save projects as QuickTime movies or record them back to the camera. Unfortunately, the system requirements are on the steep side—according to Apple, iMovie requires a PowerMac G4 or a PowerBook with built-in FireWire, Mac OS 9.0.4, QuickTime 4.1, 64MB of RAM, and a FireWire cable to hook up a digital camcorder.—IS

Who says you can't take your office with you on vacation?

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scrapbook

Everything you ever wanted to know about everything—or at least this.

What's in a JPEG?

by Ian Sammis

JPEG files are amazingly ubiquitous—it sometimes seems you can hardly create a new folder without a few JPEG files (along with copies of SimpleText, Stuffit Expander, and a few assorted read-me files) spontaneously appearing in it. In the interest of humankind (or at least to satiate our own curiosity), we decided to dissect a JPEG file to see what it contained. Here's what we found.

Lossless Compression

Before we can get a good look, we have to decompress the file—JPEGs are stored in a compressed form, such as Stuffit Archives. This step doesn't actually change the image at all—the artifacts we're used to seeing come from other sources, not from decompression.



Crack.tif

YCrCb

Instead of the red, green, and blue values so familiar to HTML coders, JPEG stores image colors using Y (brightness), Cr (brightness minus red), and Cb (brightness minus blue) values. This scheme means the JPEG encoder takes more care in preserving precise brightness values (to which the eye is extremely sensitive) than in maintaining color values.

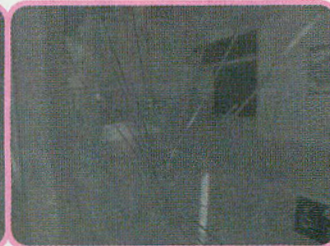
Y (brightness)



Cb (brightness minus blue)

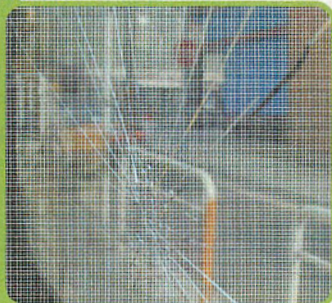


Cr (brightness minus red)



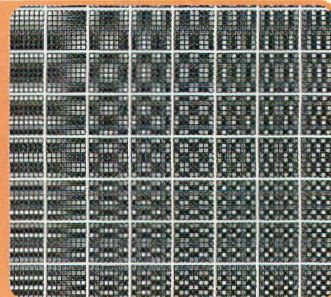
8 by 8 Squares

The JPEG file gets saved as a series of 8-by-8-pixel squares, preventing artifacts from spreading too far from their sources.



Patterns

The JPEG format stores each square as a combination of the 64 patterns pictured here, almost as if the patterns were stacked in 64 separate Photoshop layers. JPEG files store how much of each pattern to blend together to produce the final square of pixels (once decoded), rather than storing the actual pixel values.



Compression Expression



In a **low-quality JPEG file**, the JPEG encoder saves space by only storing rough estimates of how much of each pattern to use. The final result is at best a blurry, distorted version of the original.



A **high-quality JPEG file** is very accurate—it uses a precisely calculated amount of each pattern, and the patterns blend correctly to reproduce the original image.



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and check our list of authorized Resellers, or call 1-877-220-8000



calendar

the MacAddict

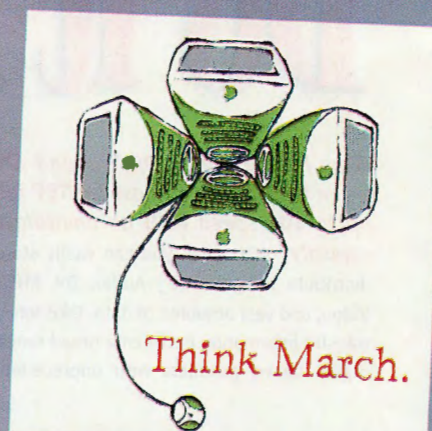
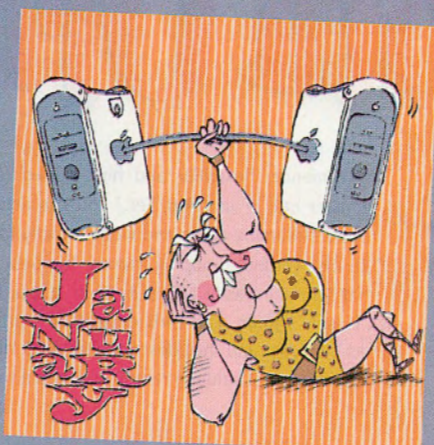
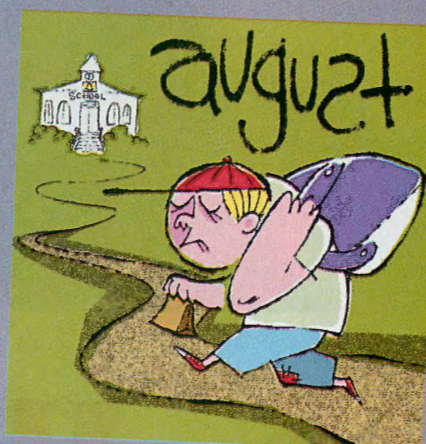
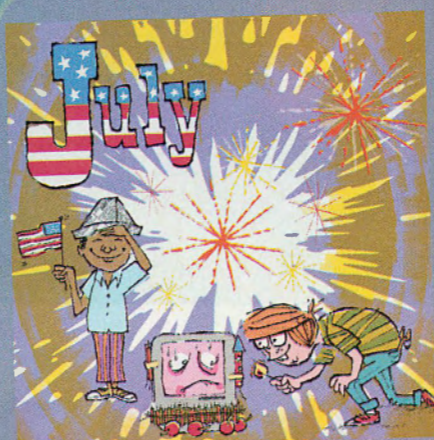
CALENDAR



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SOFTWARE
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and special
Ian-Sammi-
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off The Disc,
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CONVERGE
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FORUMS
to discuss
our calendar
tips and
projects at
[http://www.
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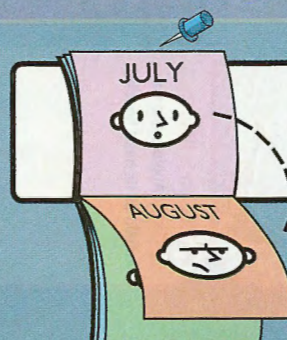
365 days of tips, activities, projects, and

by Cathy Lu, Narasu Rebbapragada, and David Reynolds
Illustrations by S.Britt

2000 2001 ndar



Apple **history**



To get the most out of your calendar, just turn it on its side and hang it on the wall.

sunday

monday

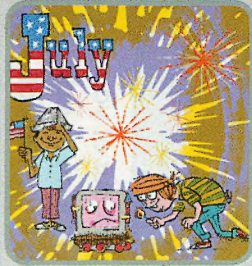
tuesday

wednesday

thursday

friday

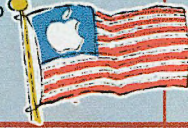
saturday



2 Rebuild your desktop (press Command-Option at startup).

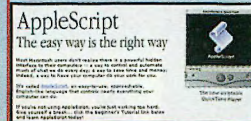
3 Download the Palm desktop (<http://www.palm.com>)—even if you don't have a Palm—and organize your life.

4 **Independence Day**—Stay independent of your Mac for just one day. Eat a heap of barbecue chicken to distract yourself.



5 HotSync your PDA to your Mac before the battery runs out and your nicely organized life gets deleted.

6 Check the AppleScript site (<http://www.apple.com/applescript>) and learn how to write a new script.



7 Free yourself from spam. Set up filters in your email program. Access filters in Eudora from the window menu or go to Rules in the Tools menu in Outlook Express.

8 **Tip:** To copy files from one folder to another or from a disk to your hard drive, hold down Option while dragging the file to its new location.



9 **This Day in History:** 1997. Apple ousts Gil Amelio as its head honcho.

10 Warm July nights are perfect for stargazing. This week, use your Mac to figure out just what you're looking at.



11 **Step 1.** Obtain a copy of Starry Night Backyard or Starry Night Pro (<http://www.sienasoft.com>).



12 **Step 2.** Install Starry Night on your Mac and set it for the time and date when you want to do your stargazing.

13 **Step 3.** Print out the view you're most interested in seeing.

14 **Step 4.** Locate a dark area (away from cities) where you can watch the sky without getting arrested.

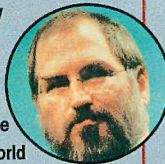
15 **Step 5.** Use the starchart to gaze at the heavens in wonder.

16 Zap your PRAM by pressing Command-Option-P-R at startup.



17 Upgrade to RealPlayer 7 (<http://www.real.com>). Customize the channels for what *real* people actually want to hear.

18 Get involved in long, geeky debates about what Steve Jobs will announce at the Macworld Expo tomorrow.



19 Whatever Steve Jobs announces at the Expo, say you predicted it.

20 Attend the Macworld Expo exhibits and see how much free stuff you can collect. If you're not in The Big Apple, head over to MacAddict.com to see what you're missing.

21 Attend Macworld Expo and enter as many raffles as you can. See if you can win a prize that's actually useful.

22 Read a license agreement and see which of your God-given rights you've relinquished.

23 **This Day in History:** 1996. The first issue of MacAddict hits the newsstands.

24 This week, dream up your own dot-com business and free yourself from the corporate world.

25 **Step 1.** Register a domain name at Register.com (<http://www.register.com>) or Network Solutions (<http://www.networksolutions.com>).

26 **Step 2.** Draft an NDA and a business plan.

27 **Step 3.** Visit the San Francisco Bay Area and throw a rock. You have a better than 50 percent chance of hitting a venture capitalist willing to fund your Internet enterprise.

28 **Step 4.** Talk up your stock in chat rooms.

29 **Step 5.** Schedule an IPO.

30 **Step 6.** Admit failure and sell your URL on eBay.

31 Backup all of your important files.



sunday

monday

tuesday

wednesday

thursday

friday

saturday



1 Buy a good virus program if you don't have one, then download and run it. We recommend Dr. Solomon's Virex (\$49.95 SRP, <http://www.drsolomon.com>) or Norton Antivirus (\$69.95 SRP, <http://www.symantec.com>).

2 Rebuild your desktop by pressing Command-Option at startup.



3 **This Day in History:** 1992. Apple introduces the first PowerBooks—the 100 and 140. 1993. Apple introduces the Newton message pad.

4 Write a letter to Activision at 3100 Ocean Park Blvd., Santa Monica, CA 90405 or email support@activision.com. Ask the company for a Mac version of Tony Hawk Pro Skater.

5 Delete any potentially embarrassing bookmarks in the Favorites (Internet Explorer) or Bookmarks menu (Netscape) of your browser, since the other kids will soon be home from camp.



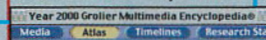
6 **This Day in History:** 1997. Steve Jobs announces an alliance with Microsoft at Macworld Boston.



7 Prepare yourself—or your kids—for going back to school this week.

8 **Step 1.** Plan out a class schedule in Microsoft Excel.

9 **Step 2.** Buy a CD-ROM encyclopedia—Grolier Multimedia Encyclopedia (\$49.95 SRP, <http://www.grolier.com>) or IBM's World Book (\$69.95, <http://www.worldbook.com/products>).



10 **Step 3.** Send your new roommate an iCard.



11 **Step 4.** Visit The Gap Online (<http://www.gap.com/onlinestore/gap>) to ensure you're dressed exactly like everyone else who's returning to school.

12 **Step 5.** Make a list of all the things you need to pack up for school. Check to see if you can order them online.

13 **Step 6.** Catalog your CDs in FileMaker Pro so you'll know if your roommate steals even one.

14 **Step 7.** Set up a macro in Microsoft Word that fills in headings for all your homework assignments (just go to the Tools menu and select Record New Macro under Macros).

15 **This Day in History:** 1998. Apple introduces the iMac.

16 Enjoy the last lazy days of gaming. Play your favorite game *all* day long.

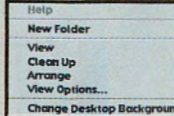


17 Zap your PRAM by pressing Command-Option-P-R at startup.



18 Download a shareware program like BirthdayChecker or Birthdays and Such (both available from <http://www.download.com>) to keep track of important dates.

19 **Tip:** To compensate for the lack of the two-button mouse (standard on PCs), hold Control while you click—a whole world of new options will appear before your eyes.



20 Organize all of the messy cords in your home office. Martha Stewart would be proud.

21 Become a digital DJ. Remix a version of "She Blinded Me with Science" and reminisce about why the 1980s ruled. Go to <http://promotions.yahoo.com/promotions/groovegrams>.

22 If you haven't done so already, look into getting DSL or cable by calling your phone or cable company—it really is *that* much better.

23 **Tip:** In Extensions Manager, make special sets for games. Disable Extensions for apps like Word and Photoshop and leave on the ones for QuickTime, Game Sprockets, 3D drivers, and specific games.

24 **This Day in History:** 1993. A court dismisses Apple's look-and-feel suit against Microsoft.

25 **This Day in History:** 1995. Apple introduces the PowerBook 5300.

26 Get involved in the MP3 revolution. Download an MP3 player application like Casady & Greene's SoundJam (\$39.90, <http://www.soundjam.com>) or Panic's Audion (\$17.95, <http://www.panic.com>).



27 Download MP3s from sites like MP3.com and Listen.com, as well as by searching for your favorite songs using various engines.

28 Discover your inner DJ and stream your MP3s to a captive audience using iStream (\$29.99, <http://www.arcticsw.com/istream>).

29 (Don't ever!) Download your favorite MP3s using Macster (<http://www.macster.com>).

30 Start saving for a portable MP3 player. We like Diamond Multimedia's Rio 500 (\$270 street, <http://www.S3.com/default2.htm>).



31 Backup all of your important files.

sunday

monday

tuesday

wednesday

thursday

friday

saturday



3 Automate a basic maintenance task using AppleScript (<http://www.apple.com/applescript>).

4 **Labor Day**—Give your Mac—and yourself—a day off from work.

5 HotSync your PDA to your Mac.

6 New to NASDAQ? Sign up for an E*TRADE account (<http://www.etrade.com>) and join the money-come, money-go revolution.



7 Balance your checkbook online to make sure you have enough money to invest.

1 **Tip:** To find the original icon of an alias, click it and hold down Command-R.

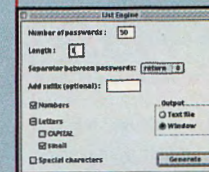


2 Rebuild your desktop by pressing Command-Option at startup.



8 Host a You Don't Know Jack (Berkeley Systems, <http://www.berksys.com>) party, pick supersmart partners, let them answer all the hard questions, and then gloat about your trivia superiority.

9 This week, create a hard-to-crack password.



10 **Step 1:** Download and decompress Multiman's Password Engine from <http://www.multimania.com/luthi/passwordengine>.

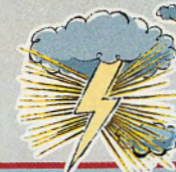
11 **Step 2:** Launch Password Engine and fill in the details for the kind of password you want in the List Engine Window.

12 **Step 3:** Click the Generate button to generate the number of passwords you specified in the Number Of Passwords field.

13 **Step 4:** Choose a password from the ones generated. Face it: This is a lot more secure than using your birthday or your poodle's name.

14 **This Day in History:** 1992. Apple introduces the first Performas—the 200, 400, 600, and 600CD.

15 Zap your PRAM by pressing Command-Option-P-R at startup.



16 Host a LAN party and play Unreal Tournament (\$49.99 SRP, <http://www.wizworks.com/macsoft/homepage.htm>) until you've gone blind and can't sit up unassisted.

17 **This Day in History:** 1985. Steve Jobs resigns from Apple.

18 Download Tetris (from <http://www.download.com>) and rediscover the joys of simple gaming.



19 Buy the ATI Xclaim TV tuner (\$99.99 SRP, <http://www.shopati.com>) and watch all the season premiere shows on your Mac.

20 **This Day in History:** 1989. Apple introduces the Macintosh portable and the Mac IIci.

21 Officially copy all your old floppies to a CD or to Zip disks. If you don't have a floppy drive anymore, borrow a SuperDisk drive from work. They'll never miss it.

22 In the spirit of the summer Olympics, run a pentathlon benchmark suite on your Mac over the next week. Use the 50MB file provided on The Disc as a test tool.



23 **Hard drive:** Time how long your drive takes to duplicate our 50MB test file.

24 **Network:** Copy our 50MB test file to another Mac and time how long it takes.

25 **Modem:** Time how long it takes to download our 50MB test file.



26 **Processor:** Time how long it takes Seti@Home (<http://setiathome.berkeley.edu>) to crunch a unit of microwave data.

27 **Video card:** Run Unreal Tournament with the frame count utility on (select Tools from the TimeDemo Statistics menu) to get a reading of fps performance.

28 Log on to the MacAddict.com forums (<http://www.macaddict.com/community/forums>) and brag about how fast your Mac is.

29 Backup all of your important files.

30 **Rosh Hashanah**—Send a Rosh Hashanah egreeting (<http://www.freewebcard.com/cards/rosh-hashanah>) to a friend.



sunday

1 **This Day in History:**
1996. Apple introduces the PowerBook 1400.

monday

2 Rebuild your desktop by pressing Command-Option at startup.



tuesday

3 Visit the official site of *Buffy the Vampire Slayer* (<http://www.buffy.com>) and start a chat room rumor that Buffy and Zander are having an affair.



wednesday

4 Bury your spouse's most important work in 20 nested folders—just because you can.

thursday

5 Visit Shockwave.com (<http://www.shockwave.com>) and watch the latest *South Park* installment. Play a drinking game—take a swig every time Kenny says a word you don't understand.



friday

6 **This Day in History:**
1997. Michael Dell says of Apple, "I'd shut it down and give the money back to the shareholders."

saturday

7 **Tip:** Speed your Mac's startup time. Hold down Command and Option while you open the Memory control panel. You'll see a new section at the bottom, labeled Startup Memory Tests. Turn this off to skip the preliminary RAM tests.



8 Go to <http://www.remarq.com> and log on to the *Simpsons* newsgroup.

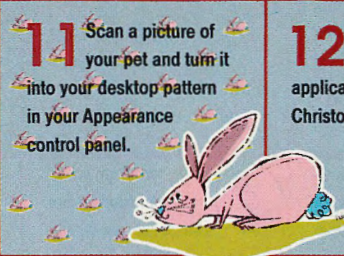
Talk about how bad you thought this week's episode was.



9 At <http://www.get-time.org>, check your Mac time against Greenwich Mean Time.

10 **This Day in History:**
1997. Apple launches its Web-based store and introduces the Power Mac G3 and PowerBook G3.

11 Scan a picture of your pet and turn it into your desktop pattern in your Appearance control panel.



12 **Columbus Day—** Explore a new application in honor of Christopher Columbus.

13 **Friday the 13th—** Keep your Mac turned off and don't come into work. Tell your boss we said it was okay.

14 Zap your PRAM by pressing Command-Option-P-R at startup.



15 **This Day in History:**
1990. Apple introduces the first LC.
1993. John Sculley resigns as chairman of Apple.

16 At [ecircles.com](http://www.ecircles.com) (<http://www.ecircles.com>), start your own book club.



17 Go to Amazon.com (<http://www.amazon.com>) and order copies of the first book for your new club's discussion.

18 Clear out all personal emails from your work account.

19 Clear out all work emails from your personal account.

20 Set up a free Web email account from Hotmail (<http://www.hotmail.com>), Netscape (<http://webmail.netscape.com>), or just about any Web site, so you can write personal email at work without getting caught.

21 **This Day in History:**
1993. Apple introduces the Quadra 650.

22 **Tip:** Defend yourself against a backstabbing coworker or stickler boss. To hide all open work immediately, hold Option while clicking your desktop. Regain it all in a flash via the Finder.

23 Clear the History in your browser. It's under the Preferences menu in both Netscape and Internet Explorer—but of course you don't use Netscape anymore.

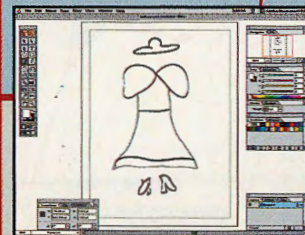
24 Turn your Mac into a Ouija board with <http://www.witchboard.com>.



25 Visit Halloween Online (<http://www.halloween-online.com>) to play games, get ideas for costumes, and learn about the history of Halloween.



26 Design your Halloween costume in Illustrator or FreeHand. Don't worry if it's a very rough image.



27 Pop a copy of *The Sixth Sense* into your Mac's DVD drive and freak yourself out.

28 Pull your cat's tail or your sister's hair. Record the sound via the Alert Sounds dialog box in your Mac's Sound or Monitors & Sound control panel. Use it for your Halloween system sounds.

29 Backup all of your important files.

30 Download Pictfader (\$10, <http://www.mpx.com.au/~stossj>) and make a slide show out of a bunch of Halloween images.



31 **Halloween—** Make a QuickTime jack o' lantern movie using Graphic Converter (\$30, <http://www.lemkesoft.com>). Put your Mac in the window and watch the kids squeal.



sunday

monday

tuesday

wednesday

thursday

friday

saturday

NOVEMBER



1 Put copies of your favorite applications in your Apple menu folder, located in the System Folder.

2 Rebuild your desktop by pressing Command-Option at startup.



3 **Tip:** When you send Word or Excel files to those unfortunates who use Windows machines, make their lives easier. Add ".doc" to a Word file name, ".xls" to an Excel file. It'll help Windows recognize its own damn files.



4 Write to Apple (One Infinite Loop, Cupertino, CA 95014) and reminisce about the days when its computers shipped with *real* mice and keyboards.

5 Put your kids or pets up on eBay (<http://www.ebay.com>) and see what they're worth.

6 Use the Internet to read up on the candidates and propositions in your local elections. Start with your local newspaper's or TV station's Web site, or try Yahoo's (<http://politics.yahoo.com>) coverage of local politics.

7 **Election Day**—Check CNN (<http://www.cnn.com>) and MSNBC (<http://www.msnbc.com>) to find out just how much your vote didn't count.

8 Delete all the email chain letters in your in-box and vow never to forward another one again.



9 Realize that your luck does not depend on whether you forward email chain letters.

10 Calibrate your monitor through the Monitors control panel and see just how off your colors have been lately.

11 **Veterans Day**—Wheel out your Mac Classic and pay homage by using it to play Shuffle Puck.



12 Zap your PRAM by pressing Command-Option-P-R.



13 Bloat your Mac this week with cool, cheap shareware and extensions until it can't consume anymore. Start with The Disc.

14 For cleaning out your system, try Skytag's FileBuddy (\$39.95, <http://www.skytag.com>), which can organize your folders by finding invisible files, unused preferences, and duplicates.

15 Download Stéphane Madrau's No Finder Zoom extension (<http://www.multimania.com/madrau/html/others.html>) to eliminate the Finder's zoom effect (the rectangles that appear as a folder opens) and speed things up.



16 Download Daniel Azuma's FileTyper (\$10, <http://www.ugcs.caltech.edu/~dazuma/filetyper>), which allows you to change file type and creator code—useful for apps from the Net or email your system won't recognize.

17 Try Alessandro Levi Montalcini's USB Overdrive (\$20, <http://www.usboverdrive.com>), which provides universal driver support for any USB mouse, joystick, gamepad, or keyboard—whether it's for a Mac or a PC.

18 If you're sick of the way your Mac looks, download Greg Landweber and Arlo Rose's Kaleidoscope (\$25, <http://www.kaleidoscope.net>) for new windows, menus, and other interface-lifts.

19 Look up turkey-day recipes on Martha Stewart Online (<http://www.marthastewart.com>).



20 Find an online grocer that delivers locally, like Peapod (<http://www.peapod.com>), Webvan (<http://www.webvan.com>), or YourGrocer (<http://www.yourgrocer.com>), and order Thanksgiving dinner.

21 Go online and find a local food bank to which you can donate food.

22 Scan a tracing of your hand and create a piece of turkey art in Adobe Illustrator.

23 **Thanksgiving**—Check out Talk City (<http://www.talkcity.com>) and find a last-minute Thanksgiving dinner tips chat.



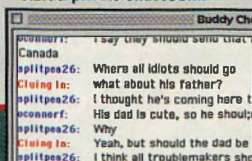
24 Wake up at 7 a.m. and get on your Mac to go shopping—avoid the holiday shopping frenzy.

25 Download Chaotic Software's Nag (\$10, <http://www.chaoticsoftware.com/ChaoticSoftware/ProductPages/Nag.html>) and listen to someone besides your spouse nagging you about bills.



26 Check Moviefone.com (<http://www.moviefone.com>) and find out where and when to watch the latest holiday releases.

27 Get a bunch of friends to download AOL's Instant Messenger (<http://www.aol.com>) and start a private chat room.



28 **Tip:** If you ever find yourself gazing at an endlessly spinning stopwatch or a Web browser that's going nowhere fast, try pressing Command-period to halt the process.



29 Make a holiday wish list or use Amazon's wish-list service (<http://www.amazon.com>) and spam your friends with it.

30 Backup all of your important files.

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December



1 Rebuild your desktop by pressing Command-Option at startup.



2 **This Day in History:** 1997. Apple buys Power Computing's Mac OS license, ending the era of Mac clones.

3 Enter or update all your contact information in a PIM such as Power On Software's Now Up-To-Date (<http://www.poweronsoftware.com>).

4 Get all your addresses ready for the holiday card onslaught. HotSync your PDA to your Mac. Download the Palm patch for your PIM if one exists, then HotSync your updated contact information.

5 Manipulate a photo of your family in Adobe Photoshop and consider sending it as a holiday card (or not, depending on how it turns out).

6 Make labels for your holiday cards in AppleWorks or Microsoft Word.

7 Download WebRoot's MacWasher (<http://www.webroot.com/macwasher.htm>) or Nicolas Berloquin's Cookie Monster (<http://www.geocities.com/Paris/1778/monster.html#download>) to check your Mac for cookies.

8 Order your holiday wares online and hope they get delivered on time (if at all) this year.

9 Order stamps online from the U.S. Postal Service (<http://new.usps.com>) so you actually get around to sending your holiday cards this year.



10 Go to 555-1212.com and look up your favorite celebrity. Send him or her a holiday card.



11 Make your spouse a mousepad with your picture on it so coworkers can see how codependent you are. Try <http://www.justdukyphoto.com> or <http://www.custommousepads.com>.

12 Purchase a new battery from <http://www.batteries.com> for your friend's aging PowerBook.

13 Upgrade your friend's version of QuickTime Pro (<http://www.apple.com/quicktime>) once and for all so they can finally watch trailers and listen to music in peace.

14 Send some homemade (well, almost homemade) chocolate chip cookies to a friend (<http://www.mrsfields.com>).

15 Zap your PRAM by pressing Command-Option-P-R.



16 Suck it up and buy your family a copy of Final Cut Pro (\$999 SRP, <http://www.apple.com/finalcutpro>) so they can make movies that actually look good.

17 Use Macromedia's Fontographer (\$349, <http://www.macromedia.com>) to make a collection of fonts you can package and give away as gifts.

18 Go to Weather Underground (<http://www.wunderground.com>) and see if tomorrow will be a snow day. Even if it's not, consider taking the day off.

19 Register (and pay for) your friends' names as a domain name on <http://www.register.com> and give the URL to them for the holidays (if they're richer than you, make them buy it).

20 **This Day in History:** 1996. Apple announces the purchase of NeXT for \$430 million.



21 Collect cool freeware from sites like Version Tracker and Download.com and burn them on CDs as a gift.

22 **Hanukkah**—Get a subscription of MacAddict for your newly converted Mac buddies.

23 Buy an Airport card and base station (\$299 SRP, <http://www.apple.com>) for someone you love and let them enjoy the wonders of the wireless state.

24 Buy a USB hub for a gadget-crazed pal.

25 **Christmas**—Decorate your Mac with Tiger Technologies' Holiday Lights (\$19.95, <http://www.tigertech.com>).



26 **Boxing Day**—Box up your old Mac in favor of the brand-new G4 someone bought you (or so you hope).

27 **Tip:** To prevent scrolling-induced migraines, turn off Smart Scrolling from the Options tab in the Appearance control panel. You won't have to pound coffee to keep up with your Mac's scrolling.



28 Visit Match.com (<http://www.match.com>) and try to get a date for New Year's Eve.



29 Go to Wine.com (<http://www.wine.com>) and order a supply of booze for New Year's Eve so you can make it through your blind date.

30 Backup all of your important files, even though Y2K is over (or is it?).

31 **New Year's Eve**—Download Ian's New Year's Eve Countdown app from The Disc and hope that he programmed it correctly.



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saturday



1 New Year's Day—Visit <http://learn2.com/04/0448/0448.php3> and learn how you can cure that nasty New Year's Eve hangover.



2 Now that the hangover's cured (we hope), rebuild your desktop by pressing Command-Option at startup.

3 This Day in History: 1995. Apple introduces the first Power Macs—the 6100, 7100, and 8100.

4 Download and edit your holiday home movies in Apple's iMovie (<http://www.apple.com/imovie>).

5 Send your iMovie off to Sundance (<http://www.sundancechannel.com>).

6 This Day in History: 1998. Steve Jobs announces a surprise \$45 million profit during his Macworld Expo keynote.

7 This Day in History: 1997. Gil Amelio reunites Jobs and Wozniak on stage during the Macworld Expo keynote, then announces plans for a Mac OS-OpenStep fusion, code-named Rhapsody.

8 Download new icons from the Icon Factory (<http://www.iconfactory.com>) and give your Mac a whole new look.



9 Tip: In the Mac's built-in CD Audio Player, customize track order by pressing the Program button. In full-view mode, the Player displays two lists. Create a new playing order on the right.



10 Attend Steve Jobs's keynote speech at the Macworld Expo in San Francisco. Count how many times he says the word "incredible." See if it exceeds the number of times he says "insanely great."

11 Try to touch Steve Jobs's sleeve at Macworld.

12 When one of the perky booth bunnies during a Macworld demo tries to call on you, duck.

13 Take charge and get rid of your Microsoft Word Office Assistant once and for all. The next time it pops up, click Options and uncheck all the boxes.

14 Zap your PRAM by pressing Command-Option-P-R at startup.



15 Martin Luther King Day—Visit Everythingblack (<http://www.everythingblack.com>), a portal that links to sites focusing on African-American issues, and do a search on Dr. King.

16 This Day in History: 1986. Apple introduces the Mac Plus.



17 Take this next week to upgrade your Mac. After all, you're in a new year, and this offers a healthy diversion from that crazy new exercise regime you've adopted.

18 Return all those socks, ties, and books you got as gifts. Maybe there's enough money to buy yourself a new Mac peripheral.

19 This Day in History: 1989. Apple introduces the Macintosh SE/30.

20 Buy more RAM and discover the joys of running Photoshop, Explorer, Word, and Quark all at once.

21 Visit Version Tracker (<http://www.versiontracker.com>) to find out what the latest version of all your software is. Start downloading updates and purchasing upgrades.

22 This Day in History: 1984. Apple airs its famous Big Brother Super Bowl commercial.

23 Upgrade your drive to one with at least 10GB. Try Western Digital (<http://store.westerndigital.com>), Seagate (<http://www.seagate.com>), and Quantum (<http://www.quantum.com>).

24 This Day in History: 1984. Apple introduces the Mac at a shareholders' meeting.

25 Update to Mac OS X and cross your fingers.

26 Defrag your hard drive using Symantec's Norton Utilities (\$99.95 SRP, <http://www.symantec.com>) or Micro-mat's TechTool (\$97.98 SRP, <http://www.micromat.com>).

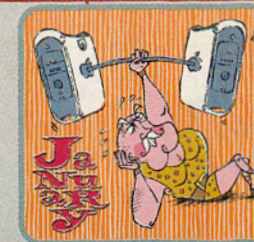
27 Try to predict who's going to win the Super Bowl by simulating the match in Aspyr Media's Madden Football (\$29.95 SRP, <http://www.aspyr.com>).

28 Super Bowl XXXV in Tampa, Florida—Place a bet on Superbowlbet.com (<http://www.superbowlbet.com/sportsbook/index.html>) and hope Madden is pretty damn realistic.

29 Visit Adcritic.com (<http://www.adcritic.com>) and watch all the Super Bowl commercials you missed. Count how many overvalued, unknown dot-com companies aired commercials.

30 Sign up with <http://www.ircle.com> and join the world of chat.

31 Backup all of your important files.



sunday

monday

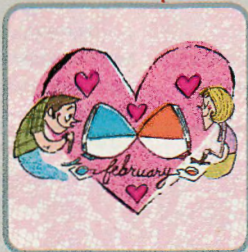
tuesday

wednesday

thursday

friday

saturday



4 Make a CD cover using a drawing or graphics program.

5 Optimize your apps' memory settings (do a Get Info on your programs, then go to the Memory window): Photoshop, 50MB up; Unreal Tournament, 120MB (at least 64MB); Internet Explorer, 15MB.

11 Buy a book about your favorite application.

12 Forget the fireplace. Instead, warm up your hands by holding them over your iMac.

18 Read the book you bought about your favorite application (see Sunday, February 11).

19 **President's Day**—Make your voice heard. Go to Vote.com (<http://www.vote.com>) and participate in the current political poll.



25 Hold a moment of silence for OS X's awesome new docking system.

26 **This Day in History:** 1996. Cheryl England starts as Editor in Chief of MacAddict magazine. Send her an email to congratulate her on her five-year anniversary at Imagine. No, really, she'll love it.



6 **Tip:** In a number of windows and applications, when you hold down the Command key while clicking, you'll see a hand, which lets you move objects in the window. This is a welcome alternative to scrolling.

13 Download a demo version of Macromedia's Flash (<http://www.macromedia.com/software/flash/trial>) and make an animated greeting card (see "Flash 101," this issue, p46).

20 Save yourself a trip to the drugstore: Buy all of your beauty products online from Drugstore.com (<http://www.drugstore.com>) or More.com (<http://www.more.com>).

27 **Mardi Gras**—Set up a Web cam and flash it. Then make a QuickTime movie of this and post it to your Apple-hosted Web site. (<http://itools.mac.com/itoolsmain.html>). P.S. Apple now owns your...

7 Send an email to someone you haven't spoken to in more than a year and see if the address still works.



14 **Valentine's Day**—Email an animated card to the object of your affection, then tell him or her how you feel in flying type.



21 Dig your old Mac out of the garage and see if a school or nonprofit organization will actually take it.



28 **Ash Wednesday**—Repent for what you did yesterday and make a full backup of all your important files.

1 Rebuild your desktop by pressing Command-Option at startup.



8 Register all the programs you've bought in the past six months. (Yes, we know you've been busy.)

15 Zap your PRAM by pressing Command-Option-P-R.



22 **Washington's Birthday**—Tell the truth and admit that you're addicted to games.



2 **This Day in History:** 1996. Apple announces Gil Amelio as its new CEO.

9 Show your appreciation for shareware—go back and pay all your fees. (Yes, we know you've been very, very busy.)

16 Send an email to your parents, then call and tell them how to retrieve it.



23 **Steve Jobs's Birthday**—Send an iCard to Steve Jobs at sjobs@apple.com and wish him a happy, um, 25th birthday.

3 Download some MP3s and make a CD compilation for your friends. (Use Macster if you have no legal or moral qualms; otherwise, use MP3.com.)

10 **This Day in History:** 1993. Apple introduces the Color Classic.

17 **Tip:** To take a picture of your screen, press Command-Shift-3. To capture just part of the screen, press Command-Shift-4 and use the crosshair cursor to define the area.



24 **Tip:** To print a selected area of text in Word, highlight that text and go to Print. Then change from General Settings to Microsoft Word and select Print Selected Text.



sunday

monday

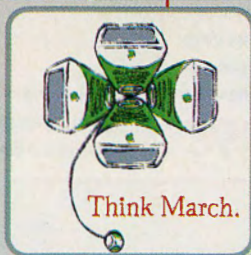
tuesday

wednesday

thursday

friday

saturday



4 Tip: Put an alias of the hard drive in the Apple Menu folder so you can maneuver through your hard drive from there.



5 HotSync your PDA to your Mac.

6 Go to Monster.com (<http://www.monster.com>) and see what you're really worth in the job market.



7 Email your boss and tell him or her what that salary figure is.

8 Go back to Monster.com and start looking for a new job.

2 This Day in History:
1987. Apple introduces the Macintosh II.



9 Customize your portal page so it shows the information *you* want to see. (Note that most sites discourage adult content.)

3 Rebuild your desktop by pressing Command-Option at startup.



10 Don't wait until you run out of toner, ink, and paper, then start cursing your printer. Order a huge supply of all three at Office Depot online (<http://www.officedepot.com>).

11 Go to Shockwave.com (<http://www.shockwave.com>) and play classic arcade games like Frogger and Centipede—legally.

12 Make a four-leafed clover in Illustrator or FreeHand and print out 10 copies. Give them away for good luck or keep them all to yourself.

13 Download a picture of the Blarney Stone from AltaVista image finder (<http://www.altavista.com>), then kiss it for good luck.



14 Go to Evite (<http://www.evite.com>) and invite all of your friends to go out drinking on Saint Patrick's Day.

15 Beware the Ides of March. Watch your backside cache today.



16 Zap your PRAM by pressing Command-Option-P-R.

17 **Saint Patrick's Day**—Index your hard drive with Sherlock while you go out and get drunk with your friends. **This Day in History:** **1988.** Apple files suit against Microsoft over the Windows OS.



18 Go to the newsgroups on <http://www.remarq.com> and do a search on your name. See if anyone's been talking about you.

19 This Day in History:
1990, Apple
introduces the Mac IIx.

20 If you don't already have an external storage drive—a Zip drive, a Jaz drive, a SuperDisk, or an external hard drive—shame on you! Go buy one immediately and back up all your important documents.



21 Don't check email for a day (just to see if you can handle it).

22 Free up hard drive space this week—get rid of all your duplicate apps and files using Doublet Scan. Follow these steps.

23 **Step 1.** Download Doublet Scan from Hyperbolic Software at <http://www.workingnet.com/hyperbolic/soft.html>.

24 **Step 2.** Uncompress Doublet Scan, then launch it.

25 **Step 3.** In the window that pops up, click the Load button and select the volume you want to scan for duplicates.

26 **Step 4.** Type Command-T to scan for duplicate files and go for a walk around the block.

27 **Step 5.** Go through the list of duplicates and mark the ones you want to throw out by selecting them and typing Command-M.



28 **Step 6.** Select **Trash**
All Marked Items
from the **Move To** menu.

29 **Step 7.** If you like Doublet Scan, register it for \$25—you can move more than 10 items to the Trash that way.

30 Backup all of your important files.

31 **This Day in History:**
1996. Apple's eWorld
shuts down.



sunday

1 April Fools' Day—Play a cruel trick—make a friend's Mac look like Windows using a screen shot of a PC emulator as their desktop pattern.
This Day in History: 1976. Apple Computer is born.

monday

2 Rebuild your desktop by pressing Command-Option at startup.



tuesday

3 Tip: In Netscape or Explorer, you can download a page to your hard drive rather than loading it in the browser—just hold down the Option key while clicking a link.



wednesday

4 Log on to a MacAddict.com forums (<http://www.macaddict.com/community/forums>) and tell us what you *really* think of the magazine. We know you will anyway.



thursday

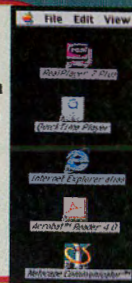
5 This Day in History: 1996. A full staff starts working on the first issue of the best Mac magazine in the world (ahem—MacAddict, of course).

friday

6 This Day in History: 1984. Apple sells 50,000 of the original Macintoshes.

saturday

7 Make aliases for all your commonly used apps and put them in an anally neat row on your desktop.



8 Passover—Learn how to make matzo ball soup (<http://www.prevention.com/cooking/recipes/passover>).
This Day in History: 1983. Apple names John Sculley as president and CEO.

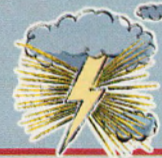
9 Tip: To move a copy of a folder anywhere on the hard drive, open that folder, then click and drag its icon in the title bar. A ghost image of the folder appears—you can drag it to any location.



10 This Day in History: 1985. In the first day of a two-day spree, Apple's board votes to strip Steve Jobs of his role as vice president and general manager, but allows him to remain as chairman.

11 Crack open a beer, buy some Cracker Jack, and log on to Major League Baseball Online (<http://www.majorleagues.com>) to listen to a baseball game. See if your boss notices.

12 Zap your PRAM by pressing Command-Option-P-R at startup.



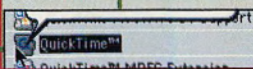
13 Buy a copy of Quicken's MacInTax (\$29.95 SRP, <http://www.macintax.com>) and load it on your computer. Start doing your taxes. If you panic, file for an extension.

14 Finish your taxes. File them electronically today so you can celebrate Easter with a clear conscience.

15 Easter—This week we'll celebrate Easter by looking for Easter eggs in the Mac OS (although some of these may not work if you've upgraded to OS X by now).



16 Easter Egg—Activate Balloon Help, open your Extensions folder, and run your cursor over the QuickTime file. You'll see a strange explanation of the QT extension.



17 Easter Egg—Open up Stickies and on a new note type the word *Antler!* (including the exclamation point). You'll see a variant of Stickies you've never run into before.



18 Easter Egg—From the Finder, press the Control, Option, and Command keys while accessing the Apple menu. Then select About The Mac OS Team.

19 Easter Egg—From the Finder, press the Option key and go to the Apple menu. Choose About This Finder. The pictures featured differ for every OS.

20 Easter Egg—Open the AppleScript Script Editor. Go to the Apple menu and select About The Script Editor. Hold down Control while clicking the Script Editor logo. Watch, then click the Credits button.

21 Visit live365 (<http://www.live365.com>) and tune in to your favorite music.

22 Tip: To collapse all the open windows in a particular application, hold Option while you double-click the title bar of one document.



23 Celebrate the upcoming Arbor Day by going paperless for a week. Consider James W. Walker's PrintToPDF, a \$20 shareware program.



24 Step 1. Download PrintToPDF from <http://www.jwwalker.com/pages/pdf.html>.

25 Step 2. Drop the PrintToPDF Chooser extension on the System Folder.

26 Step 3. Open the Chooser and select the PrintToPDF icon on the right. Close the Chooser.



27 Arbor Day—Step 4. Choose Page Setup in the program for which you want to adjust the print settings.

28 Step 5. Choose Print. PrintToPDF asks where you want to save your PDF.

29 Step 6. If you like PrintToPDF, register it for \$20. It's a bargain.

30 Backup all of your important files.



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1 Take this next week to unclutter your Preferences folder with SP Extreme's Preference Packer.

2 **Step 1.** Download Preference Packer 2.0 from <http://www.spextreme.com>.

3 **Step 2.** Double-click the Preference Packer Installer icon to load it on your Mac.

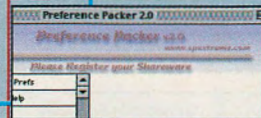
4 **Step 3.** Launch Preference Packer. Choose Preferences from the Settings menu.

5 **Step 4.** In the Preferences window, choose a location to which the program should move unused preferences.

6 **Step 5.** In the main window, click Begin. Preference Packer generates a list of preferences you might want to delete.

7 **Step 6.** Click to the left of the unwanted preferences to mark them for moving. Click Done. Toss them at your leisure.

8 **Step 7.** If you like Preference Packer, register it for \$20.



9 **Tip:** To create an alias for an icon, hold down Command-Option while dragging the icon. When you let go, an alias appears.



10 **This Day in History:** 1996. Apple stops production of the PowerBook 5300 and initiates a recall because the Li-Ion batteries were catching on fire.

11 Visit 1-800-Flowers (<http://www.1800flowers.com>) and order the bouquet of flowers your mom deserves for putting up with you. This should ensure that they arrive on Mother's Day.



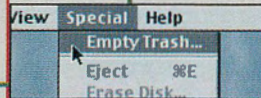
12 **Tip:** To search for invisible files, go to Sherlock and press Option while clicking Name (the search criterion). The pull-down menu now displays an option to search for invisible files.



13 **Mother's Day—** Make dinner reservations for Mom and yourself using OpenTable.com (<http://www.opentable.com>). If OpenTable.com does not serve your city—well, use the phone.

14 Commit to giving your Mac the ultimate spring cleaning for the next two-plus weeks.

15 Uninstall all apps and games you haven't touched in more than six months.



16 Disable a bunch of extensions and see how fast your Mac *really* is.

17 Root through your Extensions folder and disable every unnecessary or excessive extension. When you've made sure losing them won't cause a system error, throw them out.

18 Clean out that logjam of 3,000 emails in your in-box. We're pretty sure you don't need 'em all. And yes, that goes for *all* your email accounts.



19 Clean your desktop. That means getting rid of old and unused aliases, filing stray documents, moving folders to your hard drive, and arranging your icons in a usable and logical manner.

20 Run Disk First Aid just to make sure there's nothing seriously wrong with your system.



21 Search for the many different versions of SimpleText and the QuickTime player that probably live on your machine. Get rid of all but the latest versions.

22 **This Day in History:** 1990. Microsoft releases Windows 3.0.

23 Clean your keyboard, your mouse, and the inside of your Mac. A vacuum cleaner and canned air work well.

24 Assemble all your loose Zip disks and floppies and organize them. See what's on each disk, what you need to save, and what you can trash. Label and organize them.

25 Don't forget the usual maintenance: Zap your PRAM by pressing Command-Option-P-R at startup.



26 More usual maintenance: Rebuild the desktop by pressing Command-Option at startup.



27 Get rid of all your old fonts and speed up your applications' load time.



28 **Memorial Day—** Now that it's fashionable again, change your Mac's desktop pattern to white.

29 Organize your digital photos, QuickTime movies, and other media files using asset management software like Cumulus 5 Single User (\$99 SRP, <http://www.canto.com>).

30 Organize and clean out all the broken or unused bookmarks in your browser (under Bookmarks, select Edit Bookmarks).

31 Last but not least, do a full backup of your spotless hard drive.

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3 Buy a digital camera for your upcoming vacation.

4 Log onto Priceline (<http://www.priceline.com>) and bid \$50 for a flight to Europe. See if anyone goes for it.

5 Figure out how to put an instant-reply vacation message on your email.

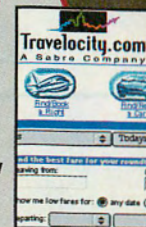


6 This week, use your Mac to give your house a lived-in look while you go on that well-deserved vacation.

7 **Step 1.** Buy an X10 starter kit from SmartHome (<http://www.smarthome.com>).

1 **This Day in History:**
1984. Apple introduces the first StyleWriter. 1997. Apple introduces the Twentieth Anniversary Mac.

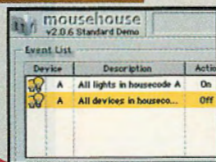
2 Start planning your summer vacation. Register with sites like Expedia.com (<http://www.expedia.com>) and Travelocity (<http://www.travelocity.com>) to find cheap airline tickets.



8 **Step 2:** Connect the X10 Active Home interface to your Mac and the appropriate module to the device you want to control—say, a lamp or radio.

9 **Step 3:** Install MouseHouse Electronics' (<http://www.mousehouse.net>) MouseHouse software on your Mac.

10 **Step 4:** Set up a schedule to turn the device on and off.



11 Rebuild your desktop by pressing Command-Option at startup.



12 **Tip:** To close your current window and open a new folder in one fell swoop, hold down the Option key while double-clicking a folder. Your current window will disappear.



13 Log onto Amazon (<http://www.amazon.com>) and order your dad a book or CD for Father's Day.

14 Set up custom key combinations for your favorite commands in the programs you use most.

15 Zap your PRAM by pressing Command-Option-P-R.



16 Check out CitySearch (<http://www.citysearch.com>) in your area and find a nice place for a picnic and a hike today.

17 **Father's Day—**Send your dad an iCard from Apple's site.



18 **This Day in History:** 1993. Apple kicks out John Sculley and brings in Michael Spindler as CEO.

19 In the Appearance menu, change the fonts on all your desktop folders. You'll feel like it's a brand-new system (well, maybe not quite).

20 **This Day in History:** 1994. Apple's online network, eWorld, debuts.

21 Use the File Synchronization control panel to back up your important data this week.

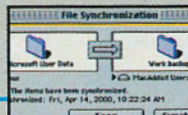
22 **Step 1.** Make sure you have File Synchronization installed. If not, install it from the System CD.

23 **Step 2.** Open the File Synchronization control panel.

24 **Step 3.** Locate the folder in which you want to make a backup, then drag it onto the left side of the File Synchronization window.

25 **Step 4.** Drag the folder for saving the backups onto the right side of the File Synchronization window.

26 **Step 5.** Click the arrow between the folders to indicate in which direction you're copying files.

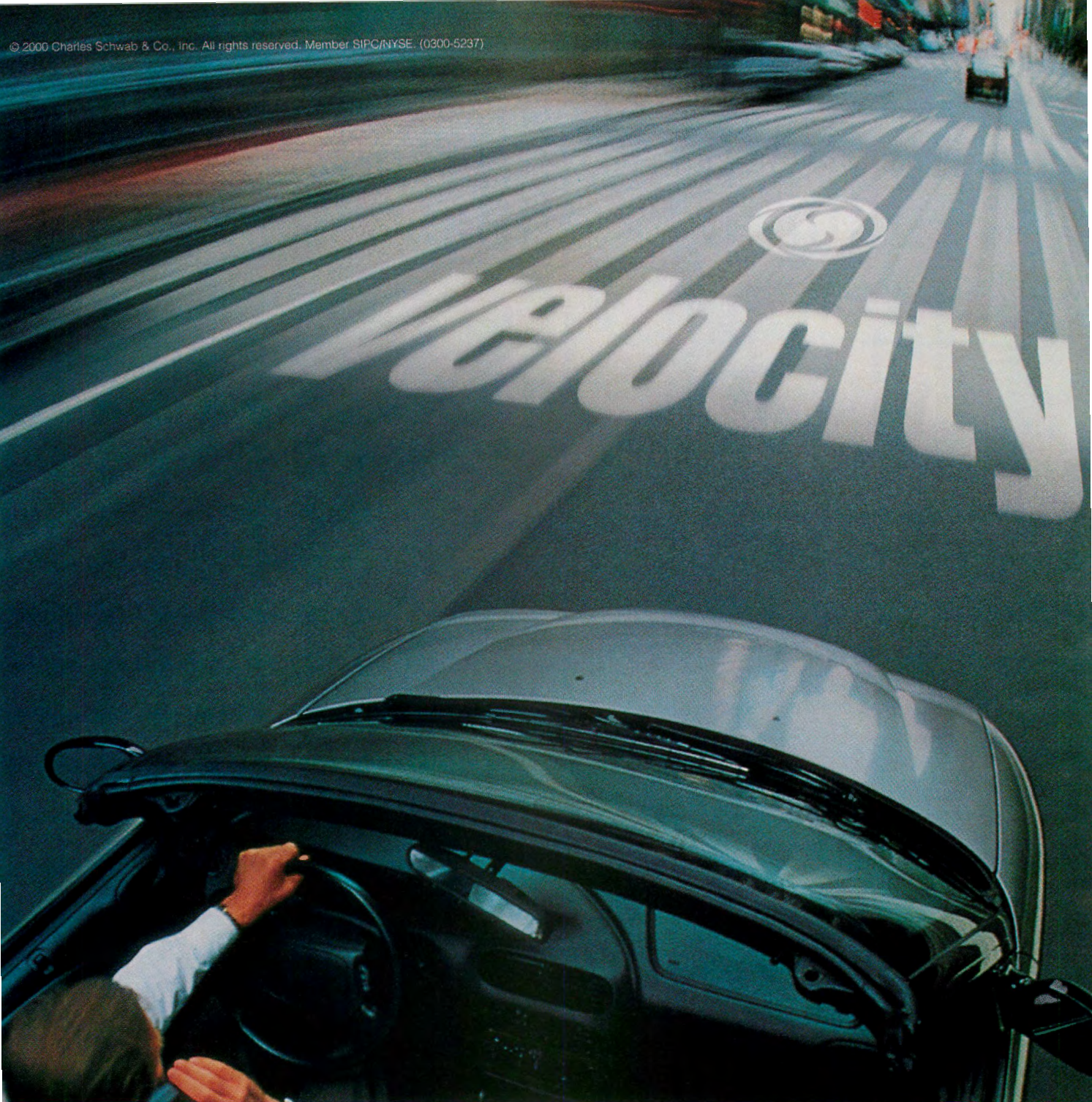


27 **Step 6.** Click Synchronize. Your Mac dutifully copies the desired files.

28 **Step 7.** The next time you click Synchronize, your Mac copies only the files that have changed since you ran the last sync.

29 Backup of all your important files.

30 Throw out all the installers for programs you've already loaded on your system. Discover new space on your desktop.



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Welcome to Velocity**—the desktop trading software designed for active investors. Velocity uses the power of your desktop to help you manage your investing more quickly and effectively.

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MSFT	Microsoft Corp.	25.00	25.50	5000
AMZN	Amazon.com Inc.	15.00	15.50	2000
APPL	Apple Computer Inc.	100.00	100.50	1000
IBM	International Business Machines Corp.	100.00	100.50	1000

Monitor up to 200 stocks.

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Charles Schwab



flash



Illustration by
Josef Gast



FIND A DEMO
of Flash, as
well as our
Flash tutorial,
on The Disc.



DISCUSS
Flash projects,
techniques,
and problems
at [http://www
.macaddict
.com/debate](http://www.macaddict.com/debate).

Learn the basics
of Flash and
become an instant
animation expert!

ou've been there. You visit a Web site innocently, and all of a sudden loud, thumping music bombards your ears. You start to dance in your seat. Stars fly across the screen, a navigation bar explodes from nowhere, and you get transported into a world of animation and sound that makes the HTML-coded pages of yesteryear seem as outdated as a fake tan. You're not surfing, baby; you're Flashing.

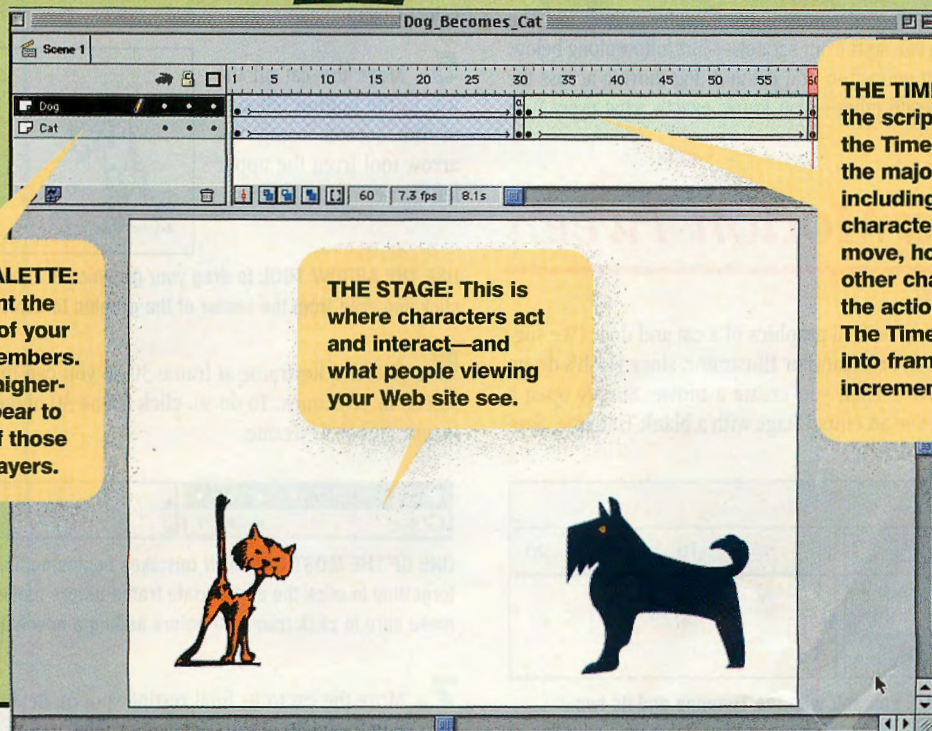
Few Internet crazes have caught on like Macromedia's Flash, and it's not hard to see why. With its easy-to-use interface, ability to sync movement with sound, streaming capabilities, and increasing integration into other Internet technologies, Flash is revolutionizing the world of Web design in a big way.

You've seen what it can do—now it's time to learn how to use it. We'll teach you the Flash basics and give you a crash course in creating a simple animation—the works, from adding sound to putting it on the Web. Don't worry, we won't throw anything *too* flashy at you.

by Jude Higdon

The Interface

flash



Digital Animation: The Basics

flashglance The Lowdown on Flash

1. Flash (\$299 SRP, <http://www.macromedia.com>) is 2D.
2. Flash is vector based (it uses graphics created in FreeHand or Illustrator).
3. Flash is interactive, so you can script movies to let viewers control the flow.
4. Flash requires a plug-in. You must export Flash movies to the Shockwave Flash (SWF) format before embedding them in an HTML page, and your viewers must have the Shockwave plug-in to play the movie via their browser.

As you probably know, animation consists of a series of still frames. By slightly changing the position of objects over the course of several frames and then running the frames together in quick succession, animators create the illusion of fluid motion. Traditional cartoon animation, as in the early days of Disney, required illustrators to create each individual frame by hand, carefully and painstakingly.

Tweening

Fortunately for you, digital animation changes all that. Now, with the click of a few buttons and the adjustment of some settings, you can create a high-quality animation. Flash allows you to define a starting and ending point for your characters, determine how many frames to place between point A and point B, and apply a process called *tweening* (short for *in betweening*) to create the animation. How do you do all that? With the Timeline.

The Timeline offers two types of frames: *keyframes* and *non-keyframes* (the latter also go by the name *frames*). You define a cast member's

position and attributes in keyframes. All other frames are non-keyframes. Flash moves members incrementally between keyframes; when they play in quick succession, the movie looks like a fluid animation.

Motion Tweening Versus Shape Tweening

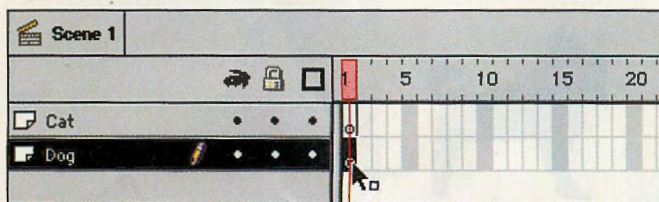
Flash gives you the ability to do two types of tweens: *motion* and *shape*. Motion tweening can accomplish many different effects, including moving objects around onscreen, resizing them, and changing their colors. Shape tweening, on the other hand, provides more devious options, allowing you to, say, morph one character into another. Here's a good rule of thumb for when to use which: Use motion tweening when you want to change the physical attributes of a single graphic—to make it change size, position, or color, for instance. Use shape tweening only when you want to transform one graphic into another.

Let's Do It, Already!

So you've read the obligatory Flash spiel—now it's time to get to the good part: making stuff. On The Disc, we've included two companion movies for this article—you can use those to re-create the animations discussed below. Of course, if you're feeling adventurous (or if you've actually lost The Disc—shame on you!), you can start from scratch—just follow along below. The goal is to create a Flash animation of a cat and dog moving across the screen and morphing into each other—you know, exactly what every Web site needs.

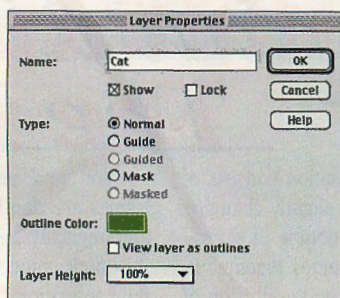
Creating a Motion Tween

1. First you'll need to draw or find graphics of a cat and dog. (We suggest drawing your graphics in FreeHand or Illustrator, since Flash's drawing tools are fairly primitive.) Then you create a movie. Simply open a new file in Flash and you'll see an empty Stage with a blank Timeline. Save this immediately.



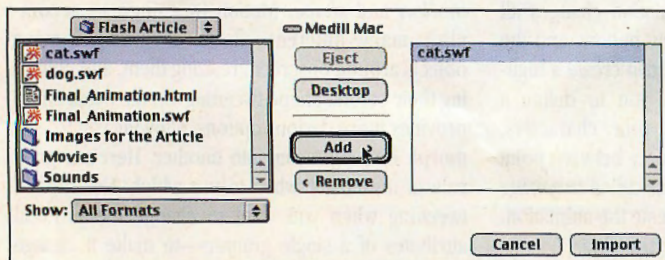
YOU'LL NEED TO FAMILIARIZE yourself with the Timeline and its two elements—frames and layers—to create animations.

2. Next, add a new layer so the cat and dog have separate homes. To add layers to a movie, select Layer from the Insert menu. It's a good idea to name every layer. Under Modify, choose Layer and change the name field. In this case, you may want to name your layers Cat and Dog.



NAMING LAYERS helps you see which graphics appear where in the Timeline.

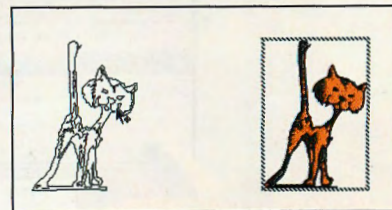
3. Import the picture of the cat onto the Cat layer. To do this, click the layer's first keyframe, then go to File and select Import. Find the cat graphic and click Add, then Import.



IMPORTING A GRAPHIC CREATED in an external editor and saved as an SWF file is one of the best ways to get high-quality graphics into your movies.

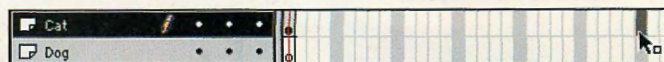
4. You must group all of the graphical elements you will be motion tweening. Under the Edit menu, choose Select All, then go to Modify and select Group.

5. Move the cat all the way to the bottom left side of the screen using the arrow tool from the upper left corner of the toolbar.



USE THE ARROW TOOL to drag your graphics around. It's good practice to click and drag from the center of the graphic to avoid distorting it.

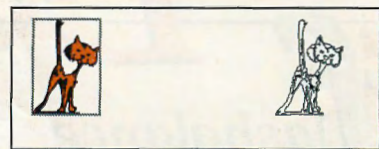
6. Create a keyframe at frame 30 so you can move the cat across the screen in 30 frames. To do so, click frame 30 of the Cat layer, then under Insert choose Keyframe.



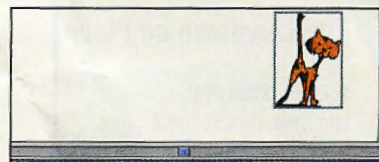
ONE OF THE MOST COMMON mistakes beginning animators make is forgetting to click the appropriate frame before making a change. Here, make sure to click frame 30 before adding a new keyframe.

7. Move the cat to its final resting spot on keyframe 30. With the cursor still in frame 30 of the Cat layer, use the arrow tool to click, hold, and drag the cat across the screen to where it will sit at the end of the movie. Holding down the Shift key while you drag the graphic makes it move in a straight line.

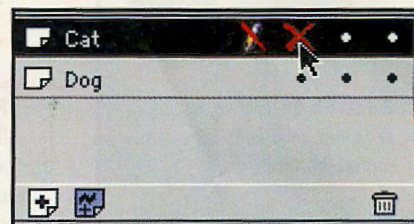
TO MOVE A GRAPHIC in a straight line, hold down the Shift key while dragging it.



FRAME 30 OF OUR MOVIE finds our cat happily moved to the right side of the screen.



8. Now you'll want to hide the Cat layer so it's out of the way while you work with the Dog layer. In the Layers palette, click the small dot located under the eye in the Cat layer. A red X appears and the cat disappears.

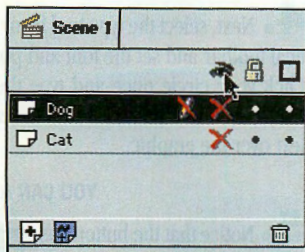


HIDE LAYERS YOU'RE NOT USING to make selecting graphics easier.

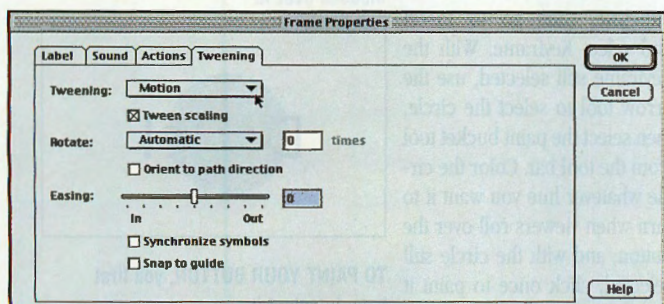
9. Click the first keyframe of the Dog layer and repeat steps 3 to 7, putting the dog on the far right side of the screen in keyframe 1 and on the far left side in keyframe 30.

10. Click the small eye icon at the top of the Layers palette twice to show all the layers.

CLICKING THE EYE ICON
above the Layers palette shows or
hides layers in the Timeline.



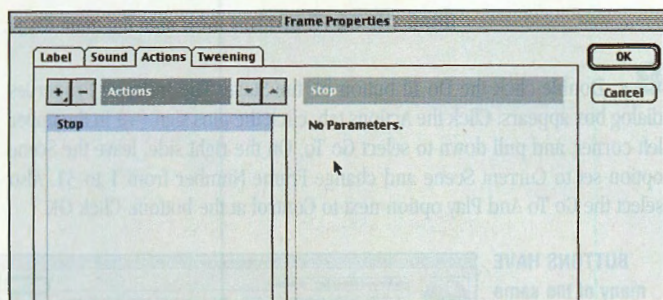
11. If you played this movie now, you would have no movement—the cat and dog would just switch places on frame 30. Why? Because you haven't added any tweening yet, of course. To add a motion tween to the dog, double-click keyframe 1 of the Dog layer. The Frame Properties dialog box appears. Select the Tweening tab. Change the Tweening option from None to Motion. Click OK.



THE TWEENING TAB allows animators to apply tweening to create movie animations. Simply double-click a keyframe to add a tween.

12. Repeat step 11 for the Cat layer. You can always press Return to play the movie.

13. Testing your movie is a very important step in the animation process. You can do this by selecting Test Movie under the Control menu. If you tested this movie now, the cat and the dog would move across the screen, then jump back to their original positions and start moving all over again because Flash movies default to continuous play. To add a stop script to the end of the movie, double-click keyframe 30 of either the Cat or the Dog layer. Select the Actions tab in Frame Properties, then click and hold the plus sign (+) in the upper left corner of that tab. Select Stop from the drop-down menu—this script tells the animation to stop at that keyframe. Click OK.



SCRIPTING FEATURES allow advanced interactivity in Flash. Here we script the animation to stop playing when it reaches the end.

14. Test the movie once more. The cat and dog will move across the screen just once, like good little beasts.

Adding a Shape Tween

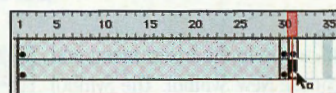
Now you're getting to the fun part of Flash, where you can accomplish all sorts of funky effects. Here, you're going to turn the dog into a cat and vice versa—all as a continuation of the movie you've already built.

1. Add a new keyframe to frame 31 of both the Cat and the Dog layer (see step 6 above).

2. The next step is a bit tricky. What you need to do is put a keyframe containing the cat in the Dog layer and a keyframe containing the dog in the Cat layer. First, copy a keyframe of the cat by clicking frame 31 of the Cat layer and selecting Copy Frames from the Edit menu. Now click frame 60 of the Dog layer and go to Paste Frames under the Edit menu. Repeat this step for the dog, pasting its keyframe into frame 60 of the Cat layer.

3. To make sure the cat and dog remain in their places during the morph, click frame 60 of the Cat layer and hide the layer by clicking the dot below the eye icon. Then click, hold, and drag the cat to the left side of the stage. Click the eye icon again to reveal the Cat layer. Repeat this step for the Dog layer, but drag the dog to the right side of the stage.

COPYING AND PASTING FRAMES
can save you a lot of time and
frustration when making movies.



4. Unlike motion tweening, where you grouped all the graphics, shape tweening requires that you break graphics apart. First click frame 31 of the timeline—it doesn't matter which layer you're in. Under Edit, choose Select All to select both the dog and the cat graphic. Go to Modify and choose Break Apart. Repeat this step—because of how these particular graphics are built, you need to break them apart twice to get to their core elements. (The number of times you need to break apart a graphic depends on how you built it.) Repeat this process for frame 60, making sure once more to break apart the graphics twice.



**IN ORDER TO DO A
SHAPE TWEEN,** you must
break apart the graphics
down to the core.

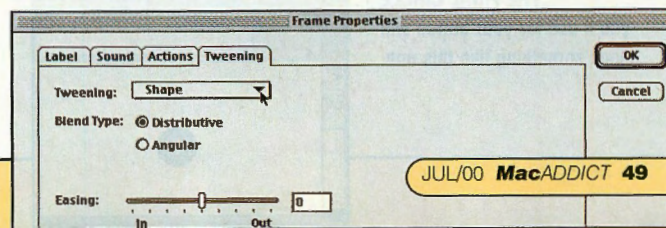


5. Double-click frame 31 of the Cat layer's Timeline and go to the Tweening tab. Change the Tweening option from None to Shape. Click OK. Repeat this step for frame 31 in the Dog layer's Timeline. Press Return to view the animation.

MAD SCIENTISTS UNITE!
Flash lets you make
graphics perform all
sorts of bizarre tricks.



SHAPE TWEENING lets you morph one graphic into another.

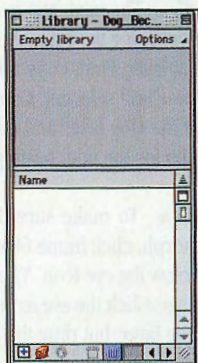


Adding Interactivity

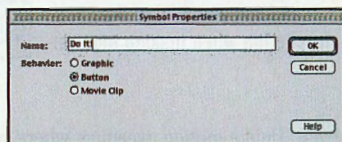
If you test your movie now, it will go through the first animation you created but won't show the second. Why? Because, if you recall, you added a stop action to keyframe 30. This stops the animation cold, regardless of what comes after it. You can fix this problem in a number of ways. For one, you can just take the script off frame 30, causing the animation to continue straight through. But what if you want your viewers to have time to admire the new positions of the cat and dog, or give them the opportunity to grab a snack? Instead of taking the stop action away, add a button for viewers to click when they are ready to continue.

1. Open the Library by going to the Window menu and selecting Library. The Library serves as a repository for movie graphics and other useful tools, such as buttons. Here you'll create a button that allows viewers to restart the action on your movie.

NO BOOKS HERE—the Flash Library is for holding graphics that have special powers, such as buttons.



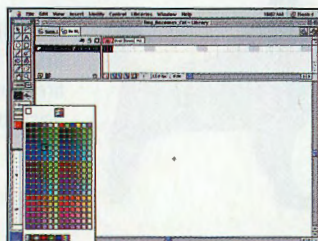
2. Go to the Insert menu and choose New Symbol. The Symbol Properties dialog box appears. Give the new symbol a name and select the Button option. Click OK.



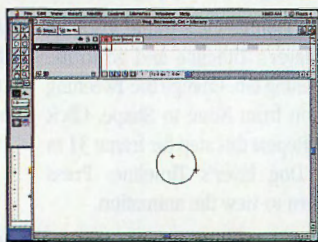
DEFINE THE PARAMETERS of your library items when creating a Do It! button.

3. Flash has some very basic drawing tools you can use to create a button. Select the oval (circular) drawing tool from the vertical tool bar. Set the line color and fill color. Then, holding down the Shift key, click, hold, and drag to create a circle in the middle of the screen.

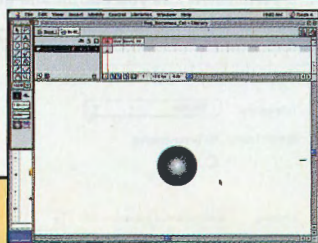
AFTER YOU'VE SELECTED the oval tool, change the line and fill color to whatever your heart desires.



HOLD DOWN THE SHIFT KEY while drawing your oval to make it a perfect circle.



THE FINAL CIRCLE you'll use for your button will look something like this one.

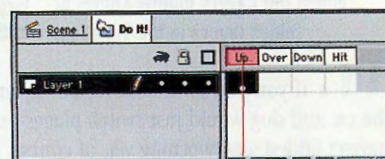


4. Next, select the type tool from the vertical toolbar and set the font and point size. Click your circle once and type the words *Do It!*, then use the arrow tool to center the text over the graphic.

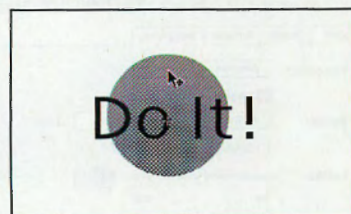


YOU CAN ADD whatever text you want to your button.

5. Notice that the button has a different Timeline from other areas of Flash. There are four distinct configurations for buttons: Up, Over, Down, and Hit. Right now you're only interested in the Over instance of the button—its appearance when users mouse over it. Click the Over frame of the movie Timeline, then go to Insert and select Keyframe. With the keyframe still selected, use the arrow tool to select the circle, then select the paint bucket tool from the tool bar. Color the circle whatever hue you want it to turn when viewers roll over the button, and with the circle still selected, click once to paint it the new color.



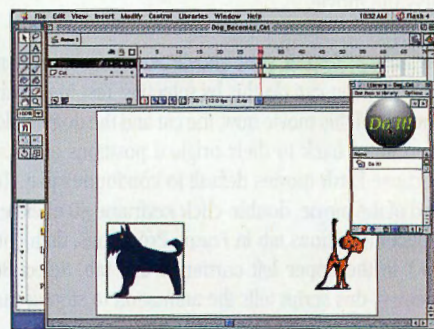
THE TIMELINE FOR BUTTONS is a little different. Here you program the Over state of the button—how it looks when a user mouses over it.



TO PAINT YOUR BUTTON, you first have to select it.

6. To add the Do It! button to the movie, go back to your original stage by clicking Scene 1 in the upper left corner, create a new layer for your button, and change the layer name to Button.

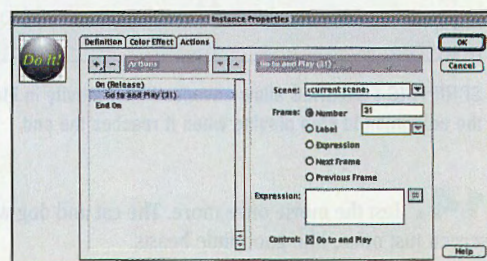
7. Insert a keyframe for your button at frame 30. Then, with the keyframe still selected, drag the Do It! button icon from the Library window to the upper middle part of the main Stage.



DRAW THE DO IT! BUTTON ICON onto the main Stage.

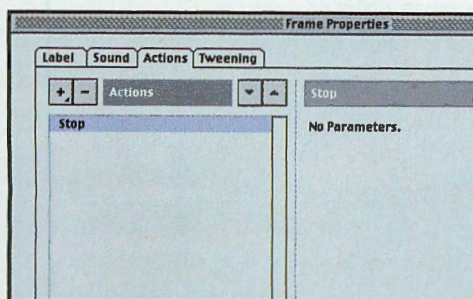
8. Double-click the Do It! button on the Stage. The Instance Properties dialog box appears. Click the Actions tab, click the plus sign (+) in the upper left corner, and pull down to select Go To. On the right side, leave the Scene option set to Current Scene and change Frame Number from 1 to 31. Also select the Go To And Play option next to Control at the bottom. Click OK.

BUTTONS HAVE many of the same scripting options as keyframes. Here you should add a Go To command, which lets the user decide when to play the shape tween.



- 9.** Test your movie now and you'll find it starts to replay at the end. Oops. You forgot to add a stop action in the final keyframe. To do so, double-click frame 60 of either the Cat or the Dog layer. Go to the Actions tab and add a stop action.

REMEMBER TO STOP YOUR MOVIE when the action finishes—otherwise Flash just starts it over again, which won't make your viewers very happy.

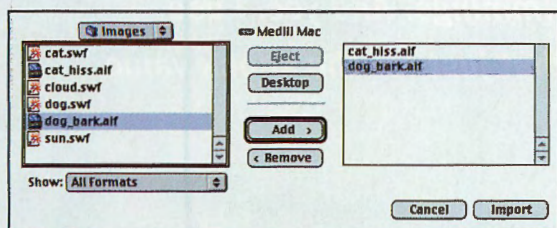


Adding Sound

An element is still missing. If cartoons have taught us anything, it's that cats and dogs can't move anywhere near each other without at least a nod to the fact that they are mortal enemies. So you'll want to hear some hissing and barking when they meet in the middle. This is an exciting Flash innovation—you can apply sound to keyframes so it occurs at a specific point in a movie.

To finish this movie off, locate some AIFF files of a dog barking and a cat hissing (or use the ones provided on The Disc). For convenience, we named these files `dog_bark.aif` and `cat_hiss.aif`.

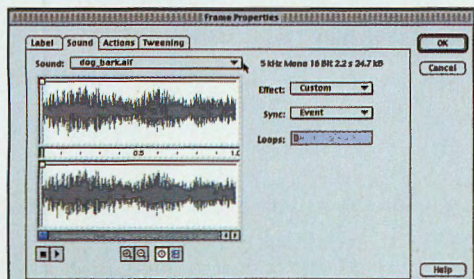
- 1.** Add a new layer to your movie and change the Layer name to Dog Sound. Add a keyframe in frame 8 of the sound layer and import the `dog_bark.aif` file.



THE IMPORT SOUND option allows you to add multiple AIFF files to your Flash movies simultaneously.

- 2.** Double-click keyframe 8 of the Dog Sound layer and go to the Sound tab. Set the Sound option from None to `dog_bark.aif`. Click OK.

ADDING SOUND TO A KEYFRAME can create a remarkable effect as the animation and sound sync up.

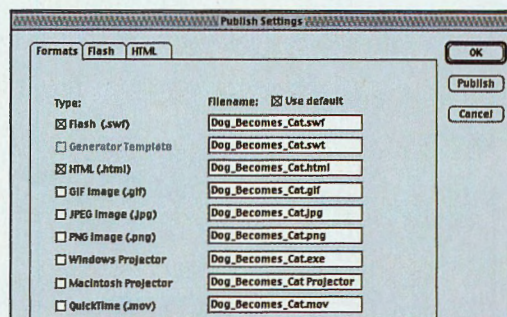


- 3.** Repeat these steps, adding a Cat Sound layer and the `cat_hiss.aif` file at frame 8.

Making a Web Page

It's all well and good to make animals growl at each other, then transmogrify into one another, but if you can't put it up on the Web for all to admire, what's the use? Here's how to create an HTML page to host your Flash movie.

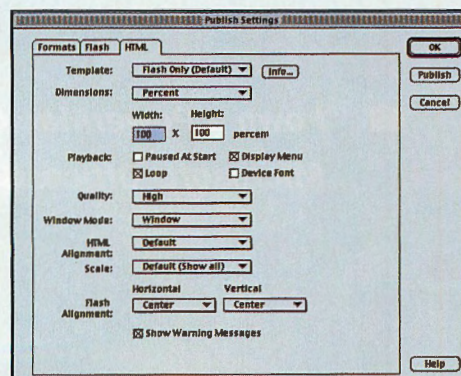
- 1.** Go to the File menu and choose Publish Settings. Select the Formats tab, where you should see the Flash (.swf) and HTML (.html) options pre-selected. If not, make them the only options selected. In the Filename field, select the Use Default option.



MAKING HTML PAGES from movies is simpler than ever with Flash 4's new publishing feature.

- 2.** Go to the HTML tab. Set the Dimensions option to Percent. This will make the movie appear at 100 percent on the viewer's screen.

HERE YOU CAN CONTROL how big the movie appears on a viewer's screen.



- 3.** Click the Publish button. This creates a `Dog_Becomes_Cat.html` file and a `Dog_Becomes_Cat.swf` file, which you can then serve up on the Web. Click OK. (One serious design flaw of Flash 4 is that you can't determine where to save the SWF and HTML files at the time you publish them—they save to the same location as your Flash movie.)

- 4.** Congratulations! You've just published your first (nearly) HTML-free Web page! Open the `Dog_Becomes_Cat.html` file in your browser of choice to see your handiwork.

Jude Higdon, a Sagittarius in nearly every sense of the word, works diligently to straddle the fine line between Renaissance man and dilettante. He currently teaches Web and page layout, graphics, and animation to budding young journalists at Northwestern University's Medill School of Journalism. He would like to thank the Academy for this honor.

■ ***"I own a PowerMac G4 with all the trimmings. And yes, I use Microsoft® Office. Sometimes I say that just for the shock value."***



name: "Jane"

age: 28

hobbies: Snowboarding

Iguanas

Bass guitar

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reviews

Light fireworks and play with your Mac—just not in the same room.

FreeHand 9

DESIGN & GRAPHICS

COMPANY: Macromedia

CONTACT: 800-457-1774, <http://www.macromedia.com>

PRICE: Stand-alone \$399 (SRP), Flash Studio \$499 (SRP)

REQUIREMENTS: Power Macintosh 120MHz or faster, System 8.1 or later, 32MB of RAM (64MB recommended), 50MB of free hard disk space (70MB recommended), 800 by 600 color display, CD-ROM drive, PostScript printer recommended

In the never-ending leapfrog game with the competition, Macromedia has outpaced Adobe with version 9 of its powerful vector-drawing app, FreeHand. With this rev, Macromedia aims to retain its popularity with the print-design market while attempting to add that lucrative Web contingent. For technical and other illustrators, print designers, and cartographers, FreeHand 9 is a great upgrade. Web folks, however, may feel less gleeful.

FreeHand 9 adds some long-sought-after new features, including mixed page sizes within a single document. Do you need to group together two pages for a graphic that spans both? The page tool lets you select, rearrange, duplicate, delete, and even *resize* pages on the pasteboard as though you were working with any drawn object. You can even move a page without moving its contents. This feature is great for product packaging, point-of-purchase advertising displays, and some types of brochures—generally projects with varying page or side sizes that don't have a lot of text.

Designers familiar with QuarkXPress's Library feature will appreciate FreeHand 9's new Symbols Library. FreeHand symbols are document based (you can copy and paste a symbol specified in one document into another document and retain its identity as a symbol). However, altering the symbol in one document changes all instances in that document only; it won't affect instances of the symbol in other documents even if you have them open simultaneously. Limiting the possibility for infinite change is a very good thing; however, we'd like to see options that

let other open documents recognize the altered symbol.

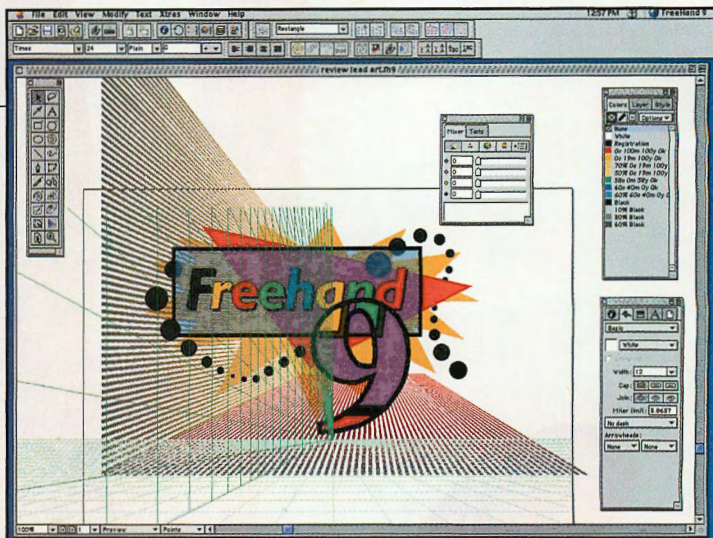
FreeHand 9's new Perspective Grid feature is an option long overdue in Illustration software. In its newborn state, it doesn't serve the purpose of large-scale, 3D illustration. You're best off creating a 2D object, then snapping it onto the Perspective Grid. Perspective Grids can have one, two, or three vanishing points, and you can adjust grid cell size. You'll have to experiment with this feature to learn its quirks. Snapping 2D art to the grid requires a few attempts as you get the hang of tapping the correct arrow key *before* releasing the mouse button. You also must use the perspective grid tool instead of the selection pointer to move the object within the grid. This new feature is a respectable first effort, however.

Live enveloping allows you to distort objects, groups of objects, and even live text (you don't have to convert them to paths first) with built-in or user-created shapes. A shape appears when you click and hold on its name in the menu. Far beyond the ability of the usual transformation tools—which merely resize, rotate, and skew—enveloping lets you tweak the applied effect. Simply adjust the points and curves of the envelope to your heart's content. (See "Pushing the Envelope," p55, for a peek

at how this feature works.) It's great for, say, bending your company logo over any irregular surface. Some shapes submit to distortion better than others, so if your shape doesn't follow the envelope's shape to your liking, try adding more Bézier points (in the Xtras menu, choose Distort, then Add Points) before applying an envelope. Tip: Option-drag to copy your object or group onto the pasteboard before adding points and applying envelopes. Experiment all you want, knowing that you can try again with a fresh, unaltered copy of your art.

FreeHand 9 makes further advances in the Web revolution with options for native SWF export, animation features, output to HTML for export to Dreamweaver, and heightened Flash integration. Some Web designers will appreciate these options; others won't. (For comments on FreeHand 9's infant Web features, see "StillGrowing.com," p56.)

The improved selection tools, though less exotic, are welcome. In one step, you can corral precisely the points or objects you want with a new lasso selection tool. Previously, selecting a set of objects or points that didn't fall neatly within the pointer tool's selection rectangle meant you had to Shift-click one point or item after another—tedious and often tricky. Although FreeHand's lasso tool feels



FREEHAND'S PERSPECTIVE GRIDS are so groovy, baby!

reviews



FREAKIN' AWESOME
The most valuable products, the coolest gizmos.



SPIFFY
A solid offering. Overall a good investment.



YEAH, WHATEVER
A few good features, but generally a waste of time and money.



BLECH!
We hate to even blotch our pages with the thing.



FIND A FREEHAND 9 demo on The Disc.



TELL US what you think at <http://www.macaddict.com/debate>.

similar to its Photoshop counterpart, we found that the FreeHand tool does a better job of displaying what you're doing as you do it.

By double-clicking the lasso and pointer selection tools in the tool palette, you can make each one Contact Sensitive. This feature is a matter of personal preference. If you prefer dragging over just the edge of an object to select the whole thing, turn on the Contact Sensitive option. If you want the selection tool to snare only the points or parts you completely encircle, leave Contact Sensitive turned off (the program default).

FreeHand 9 offers many other goodies. These include import, editing, and export of multiple-page Acrobat PDF files; greater import/export capabilities; autotracing (a magic wand tool offers greater precision in selecting); more control over the freehand drawing tool; custom measurement units and scaling; and better integration with other design applications.

FreeHand 9 is a substantive upgrade with solid new features—some great and some potentially great. Whether you'll want to purchase this release depends on who you are and what you do. Adobe Illustrator users probably won't jump ship completely (we're still waiting to see Adobe Illustrator 9 before we make up our minds). For current FreeHand users, this is a great new version. If you're looking to buy illustration software for the first time, you should base your decision on the type of illustrations you create and the groups you work with. For example, if you most often exchange files with news organizations, you'll want to choose that industry's standard, and that's FreeHand. —Elyse Chapman

GOOD NEWS: Live enveloping. Mixed page sizes in one document. Import and export multipage PDF files.

GOOD NEWS: Symbols library. Better tools and auto-tracing. 3D effects. Flash is SWF native.

BAD NEWS: Complex new tools take some time to master. Perspective grid tool awkward. Inconclusive Web tools. Fragile integration with Flash.



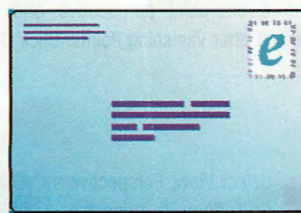
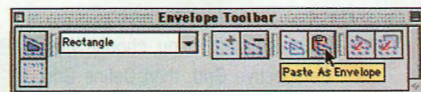
Pushing the Envelope

How to Create, Apply, and Save Custom Envelopes—EC

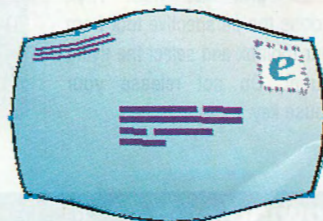
- 1 Draw the shape you'd like to use as an envelope and copy it to the Clipboard.



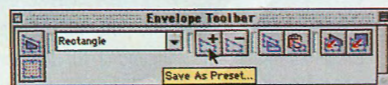
- 2 Select the object or group of objects you want your envelope to affect, then select the paste-as-envelope tool in the Envelope Toolbar.



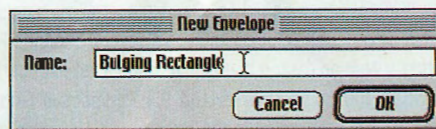
- 3 Here's the result: an enveloped envelope. If your object group doesn't conform well to the envelope, choose Distort from the Xtras menu to add more Bézier points.



- 4 To save the custom envelope you've just created and applied, select the art, then click the save-as-preset tool on the Envelope Toolbar. The New Envelope dialog box will appear.



- 5 Name and save your envelope in this dialog box. It will now show up in FreeHand's list of envelope presets.



DESIGN & GRAPHICS

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MULTIMEDIA

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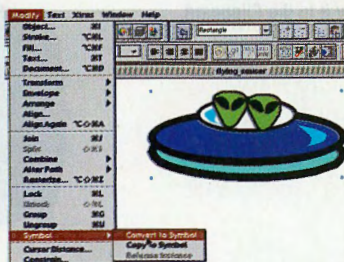
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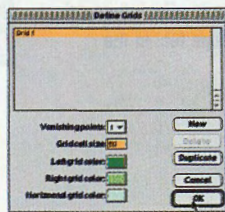
Animating with FreeHand

If you must animate solely in FreeHand, here's a step-by-step guide to creating a simple animation with the new Perspective Grid and the release-to-layers tool. We chose to go extraterrestrial.—Sherry Monarko

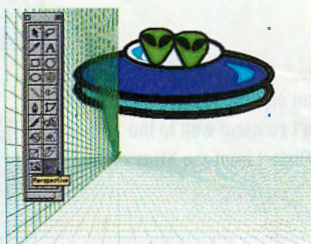
1 Draw a saucer using vector tools to get you flying. Once you're finished, group the aliens and their vehicle selected, in the main menu under Modify, choose Symbol, then Convert To Symbol. This reduces the file size.



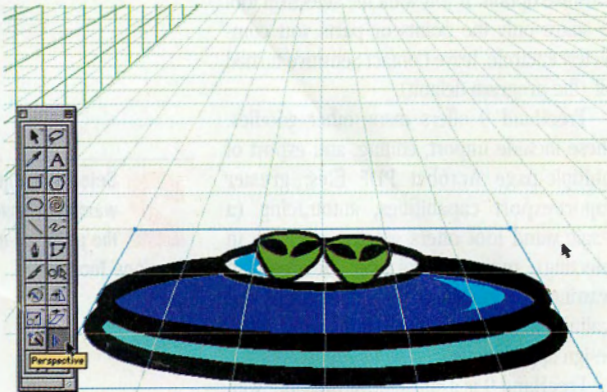
2 From the main menu, choose View, Perspective Grid, then Define Grid. In the dialog box that appears, choose a one-point perspective grid by selecting 1 after Vanishing Points. Click OK.



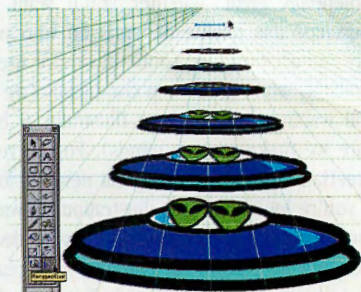
3 Select View, Perspective Grid, Show to bring the grid into view. Then choose the perspective tool from your toolbox and select the flying saucer. Do not release your mouse key.



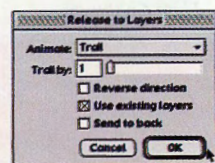
4 Still holding down your mouse key, lightly tap the down arrow on your keyboard. This attaches the object to the "floor" of the Perspective Grid. Warning: Holding the down arrow releases the object from the Perspective Grid.



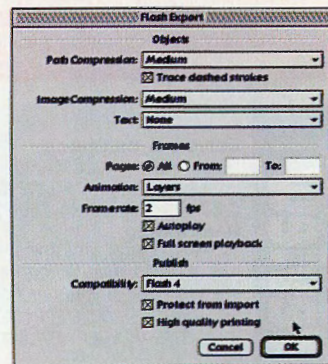
5 Hold down Shift and Option while dragging the flying saucer with the Perspective Grid tool. This constrains the object to the grid while duplicating it. Repeat this step until you have several flying saucers that disappear into the distance. Use Command-A to select all, then Command-G to group them.



6 Under Xtras in the main menu, select Animate, then Release To Layers. In the dialog box that appears, select Trail and enter 1. Click OK. Each grouped object or symbol should now appear on its own layer.



7 Under File, select Export. Under Format, choose Macromedia Flash SWF, then press the Options button. Make sure you have Layers selected for the Animation setting. Click OK and export your file.



8 To view your animation, double-click the exported SWF file; this action launches the player.

StillGrowing.com

Thanks to FreeHand 9's native SWF (Shockwave File Extension) support, creating vector illustrations and animations for the Web is easy. Awesome, we thought—until we tried to export our FreeHand animation to Flash to add interactivity (such as rollovers), sound, and other movies. We couldn't import the saved symbol library except by exporting the FreeHand file as a movie, then importing it into Flash. Worse, when we did so, Flash imported the single FreeHand symbol—constructed of various vector objects—as several separate Flash symbols.

Creating a Web animation that flies through space should be a simple two-step process when you combine FreeHand 9's Perspective Grid with the release-to-layers tool, an Animate option in the Xtras menu. However, graphics mysteriously ignored their placement on the grid so often that we found this tool more frustrating than helpful. Every time we released our perspective objects to layers, pieces of objects ended up scattered unpredictably over different layers. Plus, when we exported Flash files containing these layers into animation frames, the frames often showed the objects in two positions simultaneously. Two-step animation via the release-to-layers tool feels about as smooth as slam dancing. Ouch!

Other Web goodies taste even less sweet. The new HTML export allows extremely limited control over output of layers and tables. The only Web functionality you can add to your graphics is simple URL assignment. Automatic export of JPEG, GIF, and PNG files is useful, but without the ability to preview the results of compression—as you can do in real Web-graphic generators like Fireworks, Photoshop, or ImageReady—this feature does little good. Going from FreeHand to the Web requires too many other applications to make it worthwhile.

FreeHand 9's Web features are a good first go-round, but overall they don't make for an earth-shattering, Web-wrangling upgrade.—SM



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jazPiper for Mac

MULTIMEDIA

COMPANY: MediaForte Europe BV

CONTACT: <http://www.mcpipec.com>

PRICE: \$149.95 (SRP)

REQUIREMENTS: iMac or faster, OS 8.6 or later, 16MB of RAM, 40MB of free hard disk space, CD-ROM drive, USB port

SOUNDS GREAT. LOOKS LIKE EVERY OTHER IMAC TOY.

The jazPiper portable MP3 player is a respectable option for Mac users.

The pickings are still slim, but at least you'll need a few more fingers to count the number of portable Mac-compatible MP3 players currently on the market. The well-traveled jazPiper—manufactured by MediaForte Europe, distributed by Singapore Shinei Sangyo—is a decent player for the price. It offers a clean sound, few frills, and a modest amount of memory. At press time, the trick remains finding one through regular distribution channels in the United States.

The jazPiper device is light and compact at approximately 74 grams (about three ounces). The blue translucent plastic casing feels a little flimsy, and the display takes a moment to catch up to your button clicks, so it may seem that the device isn't responding...and sometimes it isn't. The jazPiper connects to your Mac via a USB connector attached to a PC parallel cable, barely disguising the fact that it originated as a PC device. The paltry 32MB of internal memory, which holds an average of 10 MP3 tracks, is disappointing. You can buy additional 3.3-volt 32MB smart media cards, but they cost about \$75 a pop.

Software setup is easy. The jazPiper Desk application installed and worked fine on a blue-and-white G3 and an iMac DV. It down-

loaded 10 tracks in just three minutes at an average rate of 957 Kbps. Just make sure you have the jazPiper player hooked to your USB port on your computer before installing the Desk app, or the software won't recognize the device when you connect it. When you're navigating your MP3s, put them all in the hard disk folder—the jazPiper can't access files if you leave them strewn over the desktop. The jazPiper Desk is basic cataloging software. You'll need a separate MP3 player such as Casady & Greene's SoundJam MP to encode MP3s or even play them through jazPiper Desk.

We forgive all these hardware and interface quirks because the jazPiper passes the sound quality test. The device played all of our SoundJam-, RealPlayer-, and QuickTime-formatted MP3s without skips at an output frequency range of 20Hz to 20KHz. We heard clear vocals and deep bass, though the latter sounded distorted at high volume. The jazPiper offers three modes for adjusting sound: pop, classic, and rock. The latter two modes pump out the most bass.

The software offers a rudimentary phone directory in which you can store names and phone numbers—but it's only a slight step up from a Post-it in your pocket, since you can't import any information from an existing database or PIM. The voice recorder works well, capturing voices

clearly at close range. Keep in mind, however, that you have 32MB internal memory for all voice, music, and telephone data combined. A single minute of voice recording took up 271KB of space on the jazPiper, so if you're taping an entire conversation, you might want to delete some music tracks.

Unfortunately, at press time the jazPiper was available for purchase only through Singapore Shinei Sangyo's Web site. Those wary of buying from an international e-commerce source may want to wait for a more tangible distribution channel. We can't imagine needing much support for this product (it's pretty straightforward)—however, it's worth noting that customer service is reliable but available only via email.

The jazPiper is a good, clean-sounding portable MP3 player priced at the lower end of the handful of Mac-compatible players on the market. That list is growing, though—who knows, maybe someday you'll need all your fingers to count them, and you won't have to make any compromises.—Narasu Rebbapragada

GOOD NEWS: Ease of use. Clear sound. Voice recording. **BAD NEWS:** Scant availability. Uglier than PC version. Small amount of internal memory.



PHOTOGRAPH BY AARON LAUER

MP3 Confessional

MacAddict staff members admit out loud the worst MP3s they have in their collection.

Staff Member	MP3 of Shame	Obtained Legally?
Narasu	99 Red Balloons/Nena	But of course
David	White Punks on Dope (cover)/marching band	Absolutely
Dross	Tom Sawyer/Rush	Rush rocks!
Cathy	Babe/Styx	With Styx's blessing
Ian	Six pure tones, 40Hz to 10,000Hz/Ian	Yes, for testing purposes
Rob	Home Sweet Home/Motley Crue	As far as you know
Ben	Human Nature/Michael Jackson	Direct from Michael
Jen	Never Be the Same Again/Melanie C	Sure



APS CD-RW USB Pro2

HARDWARE

COMPANY: APS Tech
CONTACT: 800-874-1427 or 816-483-1600,
<http://www.apstech.com>
PRICE: \$279.95 (SRP)
REQUIREMENTS: USB-equipped Mac



THE APS USB PRO2 uses a Mitsumi mechanism and is capable of 4X recording speeds.

Apple made a bold move when it introduced USB (Universal Serial Bus) as its sole peripheral interface. Naysayers complained that the technology couldn't handle the high-speed data transfers that modern peripherals demand. The APS 4X4X24 CD-RW USB Pro2 drive proves them wrong. This device can easily and quickly record CDs on any USB-equipped Macintosh.

Installation is a breeze. Plug in the provided USB cable and install the included Adaptec Toast 4.0 CD-burning software. The USB Pro2 can record either CDR or CD-RW media at 4X speed, creating a full

650MB CD in roughly 18 minutes. However, the Pro2 could only handle 4X speeds with the drive connected directly to the Mac's USB port. If you connect the drive through a USB hub, 4X speeds fail. The 2X speed does work through the hub, however. According to APS, this arises from a limitation of the USB protocol. A USB hub introduces sufficient noise to make CD creation fail at 4X speeds.

The Pro2 also functions well as a CD reader using the Toast CD Reader driver, and its 24X speed can keep up with most of your CD-reading needs. The drive plays all current CD formats. For audio CDs,

you must route the sound from the drive's RCA jacks to your computer's audio-in jack or external speakers using a special 1/8-inch jack.

The Pro2 exemplifies USB's ease of installation and use. If you have a USB-equipped Mac and want to burn CDs, you can't go wrong with this drive.—*Buz Zoller*

GOOD NEWS: 4X speed over USB. Easy to install and use.

BAD NEWS: Maximum 4X speed requires connecting directly to computer instead of through a USB hub. Bezel cover hides indicator lights on drive.



PHOTOGRAPH BY AARON LAUER

EPL-5700i

HARDWARE

COMPANY: Epson
CONTACT: 800-873-7766, <http://www.epson.com>
PRICE: \$399 (street)
REQUIREMENTS: Mac OS 8 or later, USB ports

Thanks in part to Apple's adoption of standardized interfaces (USB in this case), we Mac users are finally catching up on the peripherals front. The EPL-5700i is a prime example: at last, a laser printer under \$500. Unfortunately, we also face the same downside as our PC counterparts who own cheap laser printers—no PostScript support.

For those of you who slept through the desktop publishing revolution, PostScript is Adobe's page description language, enabling printers to produce sharp text and graphics from design software such as QuarkXPress and Adobe Illustrator. If you use PostScript, this machine's not for you.

The only other downside is this printer's lack of network capability. Typically, one of the big advantages an inexpensive

CHEAP, QUICK, AND QUIET:
 The EPL-5700i offers these three fine qualities—no PostScript, though.

laser printer offers is the ability to share it among several Macs. But the EPL-5700i lacks an Ethernet connectivity option, so it's not a candidate for sharing.

For a single user who pumps out lots of text pages on a regular basis, though, the EPL-5700i is perfect. At 8 ppm, it's a little slower than some more-expensive laser printers, but it trounces inkjets attempting to achieve the same print quality.

As a personal laser printer for sharp text output in quantity, the EPL-5700i is excellent. It performs quickly, reliably, and quietly, and is priced like an inkjet. If you need PostScript or network support, you'll want



to go elsewhere.

And the average small office or home user should consider the benefits—think *color*—of an inkjet. But those who simply want a personal printer for text will squeal with delight at the EPL-5700i.—*Robert Capps*

GOOD NEWS: Sharp black text on any paper. Speedy output compared to inkjets. Inexpensive. Cost efficient.
BAD NEWS: No PostScript support. No networking ability.



PHOTOGRAPH BY AARON LAUER



HP ScanJet 5300Cse

HARDWARE

COMPANY: Hewlett-Packard

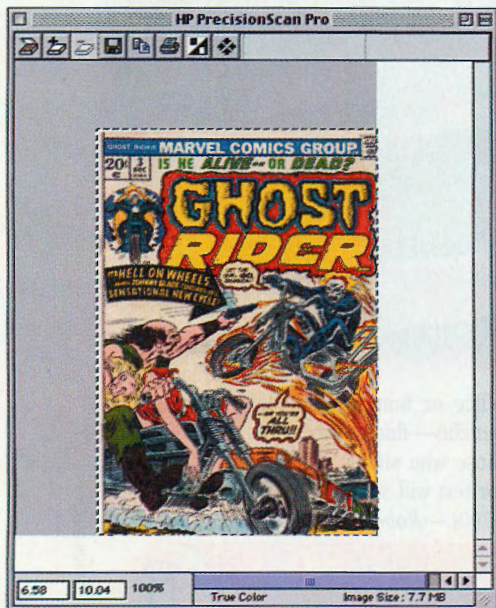
CONTACT: 800-613-2222 or 650-857-1501, <http://www.scanjet.hp.com>

PRICE: \$299.99 (SRP)

REQUIREMENTS: PowerPC Macintosh with USB, Mac OS 8.5 or later, 32MB of RAM, 15MB of free hard disk space, CD-ROM drive

The ScanJet 5300Cse marks Hewlett-Packard's return to the Mac scanning market. In the last few years, HP hasn't offered a lot of support for Mac users, but the new ScanJet changes all that with a combination of great hardware and Mac-friendly drivers. If you're looking for an all-around scanner to get pictures up onto the Web, do OCR work, or even scan images for print, the 5300Cse is a great solution.

The 5300Cse scans at up to 1,200-by-2,400-dpi optical resolution in 36-bit color. If you need more, get the 9600-dpi interpolated resolution. Naturally, this USB device offers plug-and-play setup. The scanning area is also slightly larger than letter size at 8.5 by 11.7 inches. If you're looking for speed, the ScanJet delivers that, too. A complex, full-page document took 23 seconds to scan at 72 dpi, 68 seconds at 300 dpi, and 12 minutes and 13 seconds at the full 1,200 dpi.



THE SCANJET'S SOFTWARE IS MUCHO MAC, with a very Mac-friendly interface and great little touches like the ability to detect the scanned object's area.



PHOTOGRAPH BY AARON LAUER

BEIGE ISN'T ALWAYS BAD—HP's new ScanJet 5300Cse scanner delivers everything but a fruit-colored exterior.

The 5300Cse offers one-button scanning—practically a required feature these days. Four different buttons give you one-touch access to instant scanning, copying, scanning directly into email, and faxing. The Copy button scanned the document and printed it directly to our 4000N network printer. The Email button scanned a photograph of a cat and inserted it into our default email application, Outlook Express. The Fax button successfully sent the scan to FaxSTF.

Even the case is well designed. You can lift up the cover if you're working with a large object such as a book or—in our case—a Micronaut figure. This feature allowed us to scan the white background behind the figure pretty evenly. If you're working with an even larger object or you want to use a shadow box, you can lift off the cover entirely.

Good design aside, the most important feature in a scanner is image quality, and the

5300Cse delivers. With a 1,200-dpi scan, we didn't perceive any artifacts when we viewed an image at 100 percent. Not until we zoomed to 400 percent did the scanning problems become noticeable. The 5300Cse produces excellent-quality color—robust flesh tones and deep blacks, reds, and blues—without saturation problems. At lower resolutions such as 72 dpi, quality is nearly as good. You'll start seeing some artifacts at 200 percent magnification.

The ScanJet also handles OCR through the included ReadIris 4.11 software. We managed to grab text from *MacAddict* and other magazines with consistently few typos. The ScanJet didn't handle newsprint as well as magazine stock, producing significantly more errors or even failing to read the page.

HP designed this model with expandability in mind. The next version of the 5300Cse's scanner software will support a 25-page document feeder as well as a 5-by-5-inch transparency adapter.

HP's ScanJet 5300Cse is on the expensive edge of entry-level scanners at about \$300, but for that price you're really getting a midrange unit. The 5300Cse delivers excellent scans and color fidelity at any resolution. It's also well designed, expandable, and can handle almost any scanning need, be it for Web or print. —Rick Sanchez

Software That Thinks

HP's PrecisionScan Pro 1.0 software is idiot proof. If you don't want to delve into resolution or image editing, this software will do it all for you—just press the Scan button. On the other hand, if you want control over the scanning process, you can turn off the default settings and tweak your images any way you like. The scanning software looks and feels like a Mac application, so you'll immediately feel at ease working with the menus and buttons.

GOOD NEWS: Very expandable. Excellent color reproduction. Good OCR. **BAD NEWS:** Dull beige color. Late arrival.





Xrouter MIH-120

HARDWARE

COMPANY: MacSense

CONTACT: 408-844-0320, <http://www.macsense.com>

PRICE: \$199 (street)

REQUIREMENTS: Mac with an Ethernet port, DSL or cable modem Internet connection



PHOTOGRAPH BY AARON LAUER

The explosion of fast Net connections via DSL and cable modem has made MacSense's XRouter a must if you have a wide pipeline. With its Ethernet hub, security, and easy Web-based administration, the XRouter rocks harder than a Camaro on prom night.

Setup's a breeze—connect it to the DSL or cable modem, then hook your Mac's Ethernet port to an XRouter port. Make a few tweaks in the Open Transport dialog box, and you're set. You can plug four Macs into the four available Ethernet ports, and all the connected systems (even Windows- and Linux-based ones) share the available bandwidth.

BEHIND THE COOL GREEN translucent casing beats the heart of home network power.

The XRouter uses Network Address Translation to secure your Mac behind a wall. Our port-sniffer tests found every port either stealthed (not responding to requests) or closed. This means you can run a Web server securely behind the XRouter. You can also specify open ports or give one machine clear access to incoming and outgoing traffic.

Compared to a Linux box, the XRouter is a cinch to configure—you tweak the router's settings via a Web browser. It's also reliable—we didn't experience one glitch in our tests.

If you have DSL or a cable modem and you've ever wanted to connect more than one Mac to the Internet, you need this product. It's reliable, secure, easy to set up and administer, and you may never have to worry about your Internet connection again.—*David Reynolds*

GOOD NEWS: Painless setup. Rock-solid reliability. Great security. Can use DHCP to assign IP addresses.

BAD NEWS: A little pricey for home use.



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Pixels:3D 3.6

DESIGN & GRAPHICS

COMPANY: Pixels Animation Studios

CONTACT: 619-220-4902, <http://www.pixels3d.com>

PRICE: \$999 (SRP)

REQUIREMENTS: Power Mac G3, 32MB of RAM, 30MB of free hard disk space, Mac OS 8.1 or later



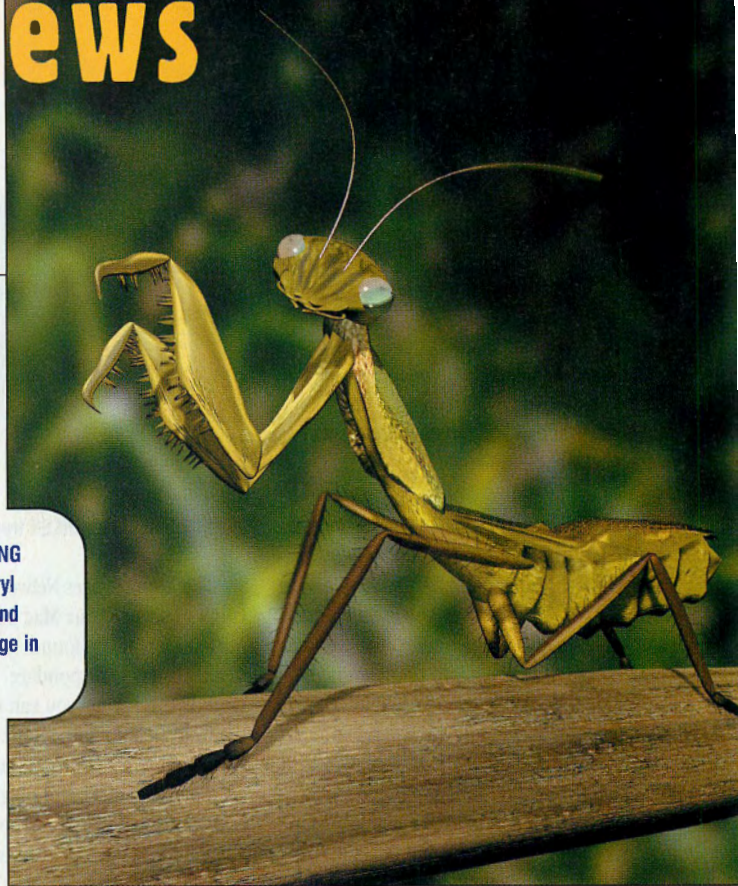
FIND A DEMO
of Pixels:3D
Studio 3.6.1
on The Disc.

When we first reviewed Pixels:3D at version 3.0, we thought it had enormous promise. Its unique shading and scripting abilities impressed us; however, some odd, cumbersome interface choices held it back. Pixels:3D 3.6 has shed much—though not all—of its peculiar baggage, making it desirable for 3D experts who need powerful scripting, rendering, and shading tools.

Pixels:3D now looks more like a real Mac app. The huge buttons are a big waste of space—you could get 24 normal tool icons in the space Pixels:3D uses for 6—but in general the GUI is much less modal and offers a big improvement over the former look, inspired by Softimage and Lightwave. You no longer have to switch modes to get at a particular button; you can access all the controls from the menu and button bar.

The animation timeline, previously one of the weakest features, is now easier to navigate. Streamline and simplify the viewing of keyframes in the timeline by hiding certain classes of objects (for example, you can choose to see only inverse-kinematics chains or lattice deformers). Most important, the timeline now has an autokeyframing button—formerly you had to create a keyframe manually or lose animation data.

IT'S SO EASY BEING GREEN: Artist Daryl Walter modeled and rendered this image in Pixels:3D 3.6.



This version adds flat and constant keyframe interpolation to the function curve editor, providing new control over subtle movements.

Minor upgrades to the modeling tools include the addition of the Wrap tool, which wraps one surface around another. You can also use this tool to trim a surface—making a hole in it—by wrapping a curve onto it and choosing that as the hole's boundaries. On the rendering side, Pixels Animation Studios has added true ray tracing and adaptive antialiasing. The program's rendering and shading tools remain about the most advanced you'll find on the Mac (see "Expert Textures," below).

One feature you won't find anywhere else on the Mac is Pixels:3D's built-in procedural

scripting tools, which give experienced users complete 3D control. Script macros to do repetitive tasks, attach scripts to objects for detailed management of object interactions, and see operations in script form. A new editor can attach a script to an entire scene, and the new text-editing tools include Syntax Coloring, Undo, and Line Numbering.

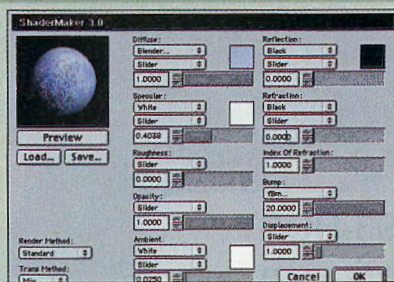
For all the program's high-level tools, Pixels:3D still needs refinement. Simply moving objects around is a pain in the neck for anyone used to Macintosh (or even Windows) conventions. You can't simply click and drag an object. Instead, you must go into Selection mode, select the object by clicking a control point or drawing a bounding box (aim very carefully or risk selecting nearby objects), and then go back into Move mode. Nor is this behavior consistent: Some tools, like the Control-Point Reshaper, act in the expected way. You can get used to these idiosyncrasies, but they add extra steps to basic operations.

The powerful Pixels:3D 3.6 software offers many features other Mac 3D apps lack. We recommend it to 3D pros with programming smarts and a tolerance for rough edges.

—Raf Anzovin and Steve Anzovin

Expert Textures

Pixels:3D has the most advanced general-purpose texturing tools you'll find on the Mac. In this example, we've used a procedural noise function to blend two colors and two levels of bump height. You can use practically any item as a blending value: an image map, a procedural surface, even the velocity of the object to which you apply the surface. Pixel:3D's shaders are Renderman compliant—that is, they use the Renderman surfacing techniques, which Pixar invented and uses in all its films—and the program can import Renderman shaders created in other programs.



PIXELS:3D'S TEXTURING TOOLS, based on Pixar's specifications for Renderman, are about the best you can get on the Mac.

GOOD NEWS: Improved interface. Scripting control of all 3D elements. Renderman shaders.

BAD NEWS: Huge tool icons. Clumsy, inconsistent object-selection tools.





SoftWindows 98 5.1

PRODUCTIVITY

COMPANY: FWB Software

CONTACT: 800-656-5443 or 415-345-4300,

<http://www.fwb.com>

PRICE: \$159.95 (SRP), \$119.95 upgrade, \$129.95 competitive upgrade for Virtual PC users

REQUIREMENTS: PowerPC 604e or faster, Mac OS 8.0 or later, 64MB of RAM, 400MB of free hard drive space (500MB recommended), CD-ROM drive

WHY, YES—I DO WINDOWS.
SoftWindows 98 does a clean job of putting a PC on your Mac desktop.



Sometimes it happens—you have to use a Windows program. Rather than disgrace your desk with an actual PC, turn your Mac into one with SoftWindows 98.

Like its primary competitor, Connectix's Virtual PC 3.0, SoftWindows does a good job of installing and running a simulated PC on your Mac desktop. There are a few differences, however. Virtual PC allows you to share an IP address between your Mac and PC sides. SoftWindows lets you drag and

drop text directly between Mac and PC programs (though you lose all formatting). Finally, SoftWindows runs a tad faster than Virtual PC.

SoftWindows 98 5.1 is *not* a must-have upgrade from 5.0.x. The only improvements this version offers are a faster installer and a copy of Windows 98 Second Edition—pretty slight changes. And like all PC emulator programs, SoftWindows has a very significant problem: Since you don't have a PC proces-

sor in your Mac, you'll never get peak performance. Still, SoftWindows is a good solution for running the occasional Windows program, as long as the app isn't too processor intensive. —Mark D. Shuchat-Marx

GOOD NEWS: Easy installation. Lets you drag and drop text between Mac and PC programs. A touch faster than Virtual PC. **BAD NEWS:** Much slower than an actual PC. No IP sharing. Dragging text across



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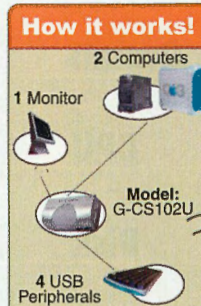


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iMaxpowr G3 466

HARDWARE

COMPANY: Newer Technology

CONTACT: 316-943-0222, <http://www.newertech.com>

PRICE: \$599 (street), \$449 with a \$150 rebate

REQUIREMENTS: iMac Rev A through D (those without built-in FireWire), nerves of steel to install the card

The iMaxpowr G3 466 processor upgrade for the iMac is a potent bit of silicon engineering. Replacing your iMac's processor daughtercard, the iMaxpowr promises to deliver up to double the CPU performance. It delivers—and does the job without any additional software. Installation, however, is no laughing matter.

The upgrade doesn't need software drivers because it replaces the iMac's original processor daughtercard with an almost identical Apple-manufactured one—the only real difference is the Newer-installed 466MHz G3 processor. The result is an upgrade that, as far as your iMac can tell, is just like the original. This means your machine knows exactly how to use it—everything just happens faster.

If you're squeamish about cracking an iMac's case, consider taking it to your Apple

PERCHED ON AN ORIGINAL iMac

processor daughtercard, the iMaxpowr's 466MHz G3 adds a lot of power to an original iMac—or even to more recent iMac models.

service person. To install the card yourself, you have to open the iMac as if you were installing RAM (which involves removing the lower portion of the case, disconnecting cables, and sliding the motherboard and drives out of the iMac's case). After this, you must remove the original processor daughtercard, transfer the RAM modules from it to the upgrade, and then put the whole thing back together. The process is easier than it sounds, and Newer provides both a comprehensive manual *and* a videotape to walk you through the process.

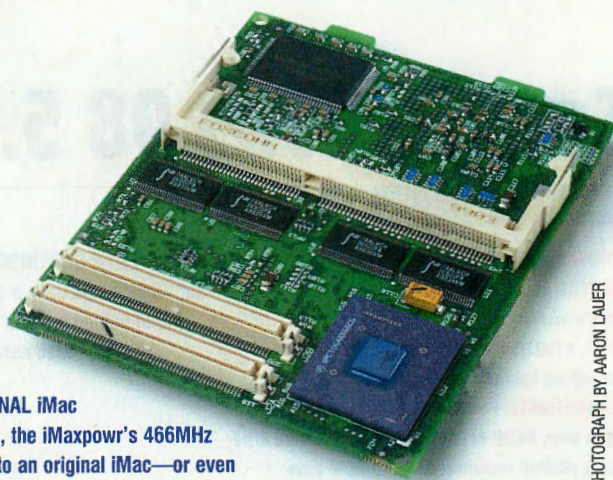
Send your original processor board back to Newer to get a \$150 rebate. Newer uses the original boards to make new upgrades—this

big chunk of change offers an incentive to send in your old board. (What were you going to do with it, anyway?)

Performance is impressive on the CPU side. Our Rev A iMac nearly doubled its speed in processor-related tasks (see "On the Drag Strip" for details). However, when it came to graphics and disk performance, we saw just a small performance bump. If you're expecting the iMaxpowr card to turn an aging iMac into an iMac DV, you'll be disappointed—Unreal won't run much better on your iMac after the upgrade. Processor-intensive programs such as Photoshop and SETI@Home *will* show a speed increase.

The decision to upgrade an iMac is a tricky one. After the rebate, the iMaxpowr upgrade card costs \$449—half the price of a new iMac. While the card *does* double the speed of a Rev A iMac, it doesn't do much for hard drive speed or graphics performance—two areas that greatly affect games. On the other hand, a new iMac ships with a big, fast hard drive and Rage 128 graphics—if you upgrade these as well on your old iMac, you'll end up another few hundred dollars in the hole, and even closer to the price of a new machine.

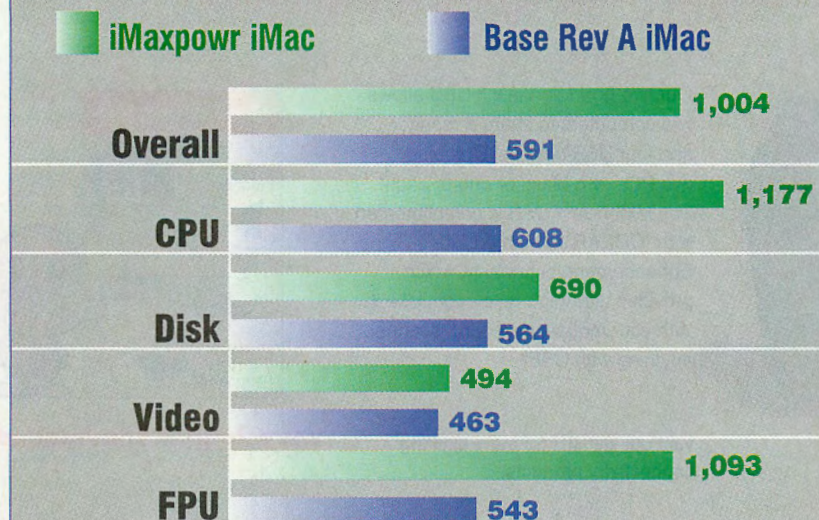
If all you need is processor speed and you make the decision to upgrade, the iMaxpowr card delivers in spades. Once you get past the tricky installation process, you can just sit back and enjoy your zippier iMac.—David Reynolds



PHOTOGRAPH BY AARON LAUER

ON THE DRAG STRIP

To find out just how much of a boost the iMaxpowr card delivered, we tested it with Norton Utilities for Macintosh's System Info. The results were impressive—the iMaxpowr nearly *doubled* our Rev A iMac's processor performance. (Test scores represent percent faster than a Power Mac 6100/60.)



The higher the number, the better the performance.

GOOD NEWS: Doubles your iMac's processor speed. Doesn't need driver software to work properly.

Rock-solid stability. Comes with a videotape to walk you through installation.

BAD NEWS: Installation isn't for the faint of heart. Upgrade doesn't do much for hard drive or graphics performance.





Maple 6

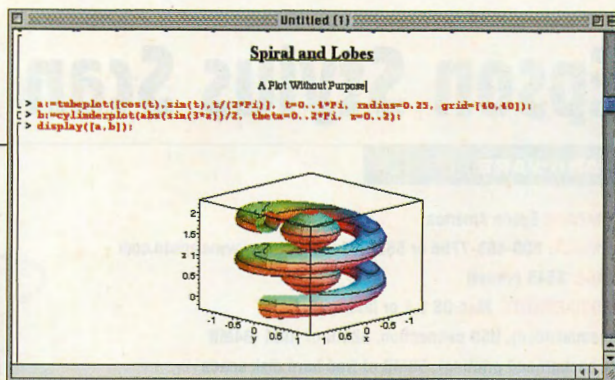
PRODUCTIVITY

COMPANY: Waterloo Maple

CONTACT: 800-267-6583 or 519-747-2373, <http://www.waterloomaple.com>

PRICE: \$1,695 (SRP), \$129 (student version), \$995 (educational version)

REQUIREMENTS: 604, G3, or G4 processor; Mac OS 8.5.1 or later; 24MB of RAM (16MB for command-line only, 64MB recommended); 60MB of hard disk space; OpenGL



THIS LOVELY GRAPH of nothing in particular shows off Maple's powerful graphics capabilities.

Next time you're itching to start a fight with people who are pretty unlikely to hit you, just go to any university theoretical physics or mathematics group, ask if its members use Maple or Mathematica, then say something disparaging about their preferred platform. The longstanding rivalry between the two platforms is approaching the level of religious fanaticism—but as a result of the competition, both packages have become almost absurdly powerful tools for analytical mathematics, 2D and 3D graphing, and arbitrary-precision mathematics. In its sixth revision, Maple has shed a few weaknesses that occasionally left it in Mathematica's shadow, and it also adds some impressive numerical muscle with a powerful new computational linear algebra package.

Maple's greatest strength lies in its rich set of packages, which support everything from tensor calculus to financial calculations. Maple's Pascal-like programming language is more familiar (although not necessarily more powerful) than Mathematica's LISP-like language. Students will be relieved to know that

the \$129 student version is fully featured, not a crippled version. Maple can emit C or FORTRAN code, so you can compile Maple-written numerical routines for faster execution. Maple doesn't separate its notebook interface from its kernel (the code that actually does the mathematics) as Mathematica does. This means Maple has snappier performance at the cost of some flexibility. You can't connect the notebook interface on a weak computer to the kernel on a stronger one, for example.

Maple 6 boasts some great new features. Given the continued (inexplicable) absence of Mathworks' MATLAB package from the Mac platform, Mac users will particularly welcome Maple's computational linear algebra package, licensed from the Numerical Algorithms Group (<http://www.nag.com>). You can import C and FORTRAN functions into Maple, although the procedure is somewhat tricky. Unfortunately, a new Excel connectivity package that would have come in handy ships only with the Windows version.

The new Maple has its flaws, however. While users will certainly appreciate the ability to import and use C and FORTRAN code, it's poorly documented—a fairly gross sin in the world of development. Maple's vast power occasionally leads to irritating notational games when you're trying to accomplish relatively simple tasks—you have to strip the $O(x^n)$ term manually from series expansions if you want to use them in further calculations, for example. Sadly—as we've come to expect from commercial technical packages—the existence of a Linux version doesn't mean a Mac-hosted Unix version is forthcoming anytime soon.

Given all this, how can you choose between Maple and Mathematica? The broad functionality of each package and their vastly disparate uses makes it impossible to declare one or the other the better platform. Your best bet is to talk with colleagues and search the Web to see which platform offers better support for your specific tasks. Failing that, visit your campus bookstore (if you're not at a university, camouflage yourself with a backpack and sweat-shirt and sneak in) and peruse the hundreds of books with titles like *Your Subject Matter in Maple* or *Your Subject Matter in Mathematica*—you'll quickly get a feel for each package. We'd like to give you more help in making the decision, but we can't responsibly do so—it depends on what you need. And with packages as good as Maple 6 and Mathematica 4, you can't really go wrong.—*Ian Sammis*

40 Flavors of Maple

Maple's greatest strength is its large number of packages it offers, which meet the needs of specific disciplines. Here's a sampling of the 40 packages Maple 6 includes.

PACKAGE	PURPOSE
combstruct	Creates combinatorial structures analytically
diffforms	Handles differential forms for differential geometry problems
finance	Financial calculations
LinearAlgebra	Computational Linear Algebra (the home of the NAG routines)
networks	Constructing, drawing, and analyzing combinatorial networks
plots	Specialized plotting tools
student	Commands to help first- and second-year calculus students
tensor	Support for the tensor math that comes up in General Relativity Theory (if this makes sense to you, you'll be very happy—if not, it doesn't matter to you)

GOOD NEWS: Excellent analytical and graphical capabilities.

Strong numerics.

BAD NEWS: Poor platform-specific documentation. No PowerPC Unix version.





reviews

Epson Stylus Scan 2500 Pro

HARDWARE

COMPANY: Epson America**CONTACT:** 800-463-7766 or 562-981-3840, <http://www.epson.com>**PRICE:** \$549 (street)**REQUIREMENTS:** Mac OS 8.1 or later (8.5.1 recommended), USB connection, 32MB of RAM (64MB for background printing), 50MB of free hard disk space (100MB recommended), iMac Update (for iMac)

The Epson Stylus Scan 2500 Pro combines a Stylus Color inkjet printer and an Epson scanner in a compact 31-pound unit. You get not just a multifunction printer and scanner, but also (eureka!) a digital color photocopier. Any of these devices would make a fine addition to a home office—having all three in one unit is a pleasure.

At 21 by 23 by 17 inches high, the multifunction Epson 2500 is not much bigger than our Umax VistaScan S-6E single-function scanner. The 2500, which uses standard Epson ink cartridges, produces high-quality output. We could barely distinguish an image printed at 1,440-by-720-dpi photo quality on glossy paper from a glossy photograph. On inkjet paper, color pages arrived bright and clean, while black-and-white plain text printed out clear and sharp, if not quite at the level of our trusty LaserWriter 4/600's output.

The 2500 had acceptable printing speed for an inkjet: a full 8-by-10-inch photo at the highest-quality setting printed in about

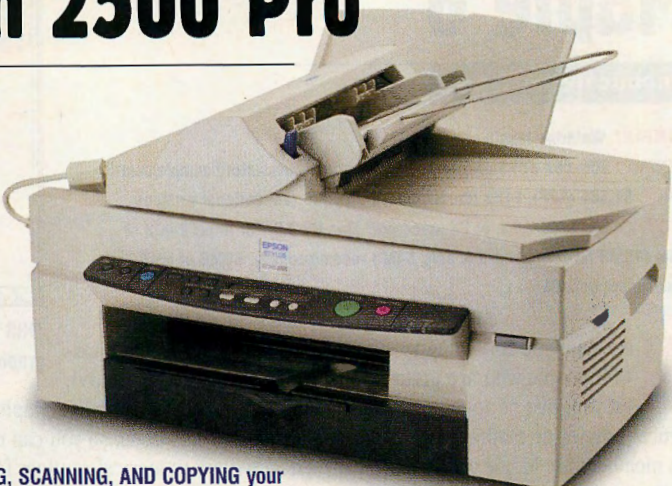
AFTER PRINTING, SCANNING, AND COPYING your masterpiece, the Stylus Scan 2500 can help you email or fax it.

10 minutes, while a 4-by-6-inch photo took about four minutes. The device printed our benchmark single-spaced text page at the rate of three ppm.

The software, however, was a bit buggy. After every print job, we couldn't use Apple Remote Access until we restarted. We also found the 2500 noisier during printing than other inkjets we've tried.

The 2500's built-in 600-by-2,400-dpi, 36-bit scanner worked like a charm, creating sharp, clean color files. It scanned sheets of up to 8.5 by 11.7 inches faster than our Umax VistaScan device did, and comes bundled with Adobe PhotoDeluxe 2.0 for image tweaking.

That brings us to the beauty of the all-in-one design: a printer plus a scanner equals a color photocopier. Drop a pile of color pages into the automatic document feeder and press the Copy button. A few minutes later, you've got color copies of every page—without turning on your Mac. With a separate scanner and printer, the same job is a time-consuming pain in the, uh, wrist. An in-house copier that handles both black-and-white and color printing is an incredible convenience.



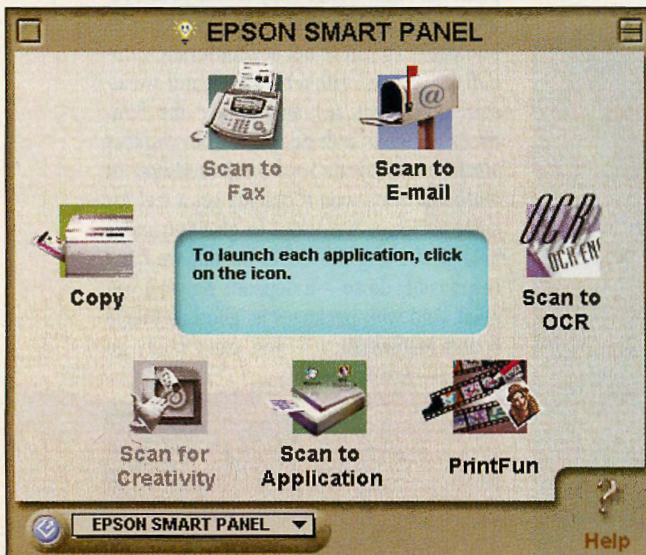
PHOTOGRAPH BY AARON LAUER

Compared to a real office photocopier, the 2500 is slow—churning out black-and-white copies at a leisurely 30 seconds per page. But you don't even have to turn on your Mac to access the full set of controls on the front of the box for setting contrast, number of copies (up to 20), reduction (down to 50 percent), enlargement (up to 200 percent), and paper size. With Epson glossy photo paper, copies of photographs come out looking like the originals.

The 2500's document feeder makes OCR a snap. The feeder sucks in a pile of type-written pages, and just a few minutes later, you can open the scanned text in your choice of word processor. The OCR feature was fast, if not astoundingly accurate.

The unit has only rudimentary faxing features. It's no big advantage to have the 2500 send the fax to your fax software automatically, since a set of command keys from most word processing software can do that anyway. On the other hand, the 2500 has a praiseworthy printed manual, with sections devoted specifically to Macintosh users.

The Epson Stylus Scan 2500 Pro combines a fine printer and a fine scanner, but the box is more than the sum of its parts, integrating its components into a useful color photocopier. The 2500 would make a great addition to any small office or home office.—Joseph O. Holmes



EPSON'S SMART PANEL SOFTWARE allows one-click access to the 2500's most common functions.

GOOD NEWS: Convenient all-in-one design. Good-quality printing and scanning. Relatively small footprint.
BAD NEWS: No serial port. Rudimentary fax integration.





NetBarrier 1.5.1

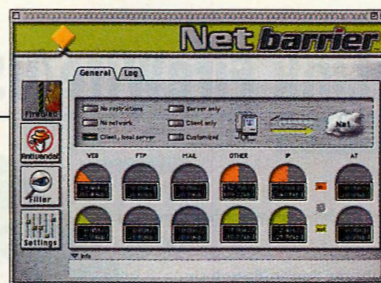
UTILITY

COMPANY: Intego

CONTACT: 305-868-7920, <http://www.intego.com>

PRICE: \$74.95 (SRP)

REQUIREMENTS: PowerPC, Mac OS 7.5.5 or later, 16MB of RAM, 5MB of free hard disk space



WATCH YOUR CONNECTIONS to the world with firewall gauges for FTP, email, Web, IP, AppleTalk, and other protocols.

Whenver your Mac connects to the Internet or an AppleTalk network, it's exposed to hackers who can steal secrets or control your computer. Cable modem and DSL users are especially vulnerable. System administrators have long relied upon sophisticated software to safeguard large networks, and now individuals can protect themselves similarly with NetBarrier.

NetBarrier protects your Mac with Firewall, Antivandal, and Filter defense features. Installation is simple, and NetBarrier works transparently in the background without affecting performance. The PDF users' manual is well written and thoroughly explains

basic functions, though it does not always explain why you'd want to invoke a particular solution option.

The Firewall option monitors TCP/IP traffic, examining the origin and destination of each data packet for suspicious behavior. You can view real-time network traffic on all 12 graphic gauges or on the detailed text log.

The Antivandal feature is the most robust. It warns you (via email or alert boxes) of suspicious activities such as repeated incorrect password attempts, ping-of-death attacks, SYN flooding, port scans, and so on. You can either respond to these threats manually or set NetBarrier to deny access automatically.

To use the Filter feature, you must manually specify all of the credit card numbers, passwords, and so forth that you would like to protect; NetBarrier can then encrypt them.

NetBarrier is certainly less expensive than a corporate firewall, but it's not cheap. If you're paranoid or need to transmit sensitive information, NetBarrier can provide some online peace of mind.—Owen W. Linzmayer

GOOD NEWS: Simple installation and configuration. Good electronic documentation. Strong network security.

BAD NEWS: Practical application of certain features not adequately explained. Not cheap.



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reviews

OrangeLink FireWire/USB PCI Board

HARDWARE

COMPANY: Orange Micro

CONTACT: 714-779-2772, <http://www.orangemicro.com>

PRICE: \$159 (street)

REQUIREMENTS: PCI-based Power Macintosh, Mac OS 8.6 or later

There's nothing like adding some USB and FireWire ports to kick-start an aging Mac, and Orange Micro's OrangeLink FireWire/USB PCI Board does this task very reliably. The card provides two FireWire and two USB ports on a single 7-inch PCI card, which takes up only one PCI slot on your Mac.

Installing the card is a cinch—just open the Mac's case, secure the card in an available PCI slot, and close the case. The included CD walks you through installing the drivers, Adobe Premiere LE, and the OrangeLink Premiere plug-ins. We do have one minor quibble: Orange Micro buries the serial number for Premiere LE in the OrangeLink Reference Guide on the CD. This Acrobat document isn't particularly easy to find, especially if you're slaving to get started with the device.

ORANGE MICRO'S PCI CARD features four ports that deliver FireWire and USB goodness.



Both the FireWire and the USB portions of the card worked smoothly, enabling us to capture full-motion DV using both Premiere and Final Cut Pro. The card worked equally well with various FireWire hard drives. We had some problems with Premiere's device control, but this seems like a software issue, not a problem with the OrangeLink hardware. (Final Cut Pro handled device control just fine.) The USB ports supported mice, keyboards, and game controllers properly, and did a fine job with the shareware über-widget, USB Overdrive.

Orange Micro included both a USB cable and a FireWire cable suitable for connect-

Hooked on FireWire

Check out other Orange Micro FireWire gizmos.

OrangeLink FireWire Hub

PRICE: \$99 (street)

This device provides four additional FireWire ports to hook FireWire peripherals to your Mac *without* forcing you to disconnect other FireWire devices.

OrangeLink FireWire Repeater

PRICE: \$49 (street)

FireWire devices have a maximum cable distance of 15 feet, but the OrangeLink FireWire Repeater (with included cable) extends that range another 15 feet. Put multiple repeaters inline to extend that distance to a maximum of 225 feet.

ing a video camera to the card. These welcome additions, along with the reliable card, constitute a great recipe for building customer loyalty.—*David Reynolds*

GOOD NEWS: Brings the latest technologies to older Macs.

Powered FireWire ports. Bundles FireWire USB cables. Decent software bundle includes Adobe Premiere. Works with both Macs and PCs. BAD NEWS: Difficult to find Premiere registration number.



OrangeLink FireWire CardBus PC Card

HARDWARE

COMPANY: Orange Micro

CONTACT: 714-779-2772, <http://www.orangemicro.com>

PRICE: \$149 (street)

REQUIREMENTS: CardBus-based PowerBook G3, Mac OS 8.6 or later

Need FireWire to go? Orange Micro has a new solution for PowerBooks that shipped after the original PowerBook G3 but before the 2000 model. The OrangeLink FireWire CardBus PC Card supplies two FireWire ports (without power) and occupies the CardBus slot in a PowerBook G3.

To install, simply plug the card into the slot and install the drivers (plus any software you might want) from the supplied CD-ROM. After a restart, you're set.

The card works well with DV capture (using both Final Cut Pro and the bundled version of Premiere LE). We ran into the same

problems with Premiere's device control as we did with the FireWire/USB PCI Board (see above), but the FireWire-based hard drives worked like a charm.

On the downside, the OrangeLink PC card doesn't deliver power to its FireWire ports—and these ports power your portable FireWire hard drives. However, this may not be advisable or even possible from an engineering standpoint. On the upside, the card works very well, is easy to install, and even comes with a six-to-four-pin cable suitable for connecting the card to a video camera.—*David Reynolds*



THIS SMALL PC CARD from Orange Micro packs a lot of power, especially for PowerBooks without onboard FireWire.

GOOD NEWS: Built-in FireWire ports—no adapter needed. Cable included. Premiere LE bundled. Works with both Macs and PCs. The price is right. **BAD NEWS:** Difficult to find Premiere registration number. No power for FireWire ports.





C3030 Zoom

PRODUCTIVITY

COMPANY: Olympus

CONTACT: 800-347-4027 or 516-844-5000,

<http://www.olympus.com>

PRICE: \$999 (SRP)

REQUIREMENTS: Power Macintosh with serial or USB port, Mac OS 7.6.1 or later, 100MB of free hard disk space, 32MB of RAM

THE C3030 ZOOM
camera has good
heft and a nice feel
in your hand—and
the image quality
is great, too.



PHOTOGRAPH BY AARON LAUER

The age of filmless photography has finally arrived, with the Olympus C3030 Zoom leading the way. Because of its ability to shoot 3-megapixel TIFFs (2,048-by-1,536-pixel images with no compression), the C3030 does a fine job of substituting for traditional film-based cameras. With the camera's built-in zoom lens, multimode flash, complete manual and automatic modes, and multimedia features, the C3030 will appeal to both the novice and the experienced digital photographer.

As a basic camera, the C3030 is a wonder to use. Its automatic mode takes great pictures without requiring too much thought. Its zoom lens is the equivalent of a 32mm-to-96mm 35mm lens (controllable via a lever near the shutter release). An additional digital telephoto mode lets you take extreme close-ups from a sizable distance. The C3030 brings in crisp images

with true color. Olympus refined the basic form factor of the C2000 Zoom for the C3030 zoom, improving the four-way hat switch above the LCD and changing the power button into a spot on the dial. You'll no longer turn off the camera by accident when you mean to snap a photo.

Shutterbugs will appreciate the ability to set most of the camera's attributes, including the aperture size, the simulated ISO rating of the "film," and the shutter speed. If you're not quite sure what exposure to use, the C3030 can bracket a shot by plus or minus two steps (in increments of one-third of a step). You can also go into the C3030's software to adjust the camera's white balance or even add special effects.

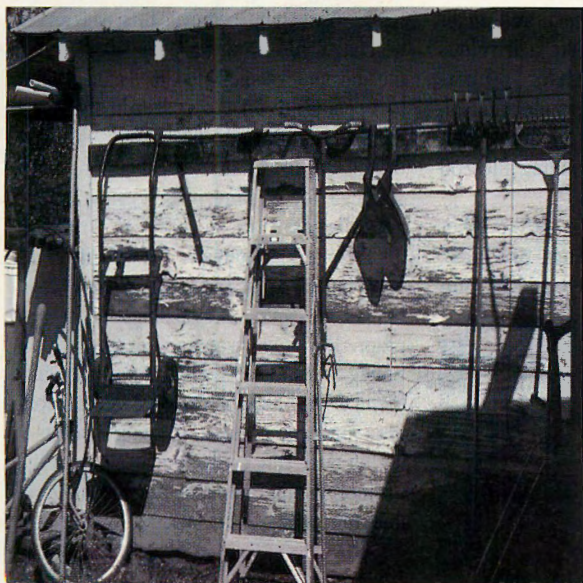
The C3030 ventures into multimedia with its ability to record audio *and* video. The supplied 16MB SmartMedia card can hold more than a minute of Motion JPEG video in QuickTime format. While this feature is no substitute for a DV camera, it's enough for a quick-and-dirty video clip. Video quality is good, with frame rates approaching those of real video cameras. The camera is capable of rudimentary editing to discard unwanted video, and you can also add a 4-second audio annotation to still images if you want to keep a record of your shots.

Pulling photos off the C3030 via USB is a joy. For those used to reading a Tolstoy novel while they wait for the images to download via a serial connection, a revelation

is at hand—downloading images via USB is much, much faster. We had some troubles getting the Camedia software (for connecting to the camera) to run on a PowerBook G3 (it kept crashing), but it ran flawlessly on a Power Macintosh G4. We also had some problems downloading the highest-resolution TIFFs, but these images transferred with no problems when we used a SmartMedia-card reader.

Other advances worth mentioning include the new rechargeable LiIon batteries that come with the camera. Equipped with these, the C3030 runs a *lot* longer than it does with the old NiCad rechargeables, answering a common—and very important—complaint about digital cameras. (The C3030 can use regular AA batteries as well.) The camera can also use an external flash, and its infrared remote can control the zoom lens and shutter.

The C3030 Zoom is an amazingly deep camera, with features and qualities that justify its steep sticker price. Although we have some minor quibbles (for example, inseting the LCD a bit would prevent scratching), the camera is a great value overall. Combined with a good photo printer (such as the Epson Stylus Photo 870), the C3030 Zoom will meet most of your photographic needs. In fact, you may never go back to film again. But you'd better stock up on SmartMedia cards—you'll need them for all the pictures you'll be shooting.—David Reynolds



THE BUILT-IN BLACK-AND-WHITE mode (one of several special effects modes) lets you take stylish images without first stripping out all of the color information in an image-editing program.

GOOD NEWS: Serious camera for serious photographers. Amazing high-resolution ability. Can capture video and audio. Great battery life. As easy or complex as you like. Tons of features. USB makes for fast downloads.

BAD NEWS: 16MB SmartMedia card a bit tight for highest-resolution images. Serial cable sold separately.





reviews

Katabounga 3

MULTIMEDIA

COMPANY: Abvent

CONTACT: 800-452-9241 or 415-431-3412,

<http://www.katabounga.com>

PRICE: \$595 (SRP), \$469.99 (street)

REQUIREMENTS: PowerMac, Mac OS 8 or later,
64MB of RAM, 100MB of free hard disk space,
CD-ROM drive, QuickTime 4.0

Abvent positions Katabounga 3 as a good multimedia authoring package for beginners—and that's *almost* true. The package is easy to use overall, but some serious problems prevent Katabounga from rating as the top choice for developers at any level.

The powerful application has a straightforward interface. A Scenario window presents a hierarchical outline of your project, with scenes representing each new screen of your project. Each scene contains the media elements, such as pictures or sounds, and the code describing what should happen. A drag-and-drop palette contains a list of programming commands; another palette contains your media.

Katabounga's object-based authoring environment lowers the proficiency barrier, allowing nonprogrammers to create compelling content and access a lot of interactive functionality through drag-and-drop code snippets called behaviors. One behavior might launch a Web page, another might turn a cursor into a hand when you roll it over a button. Simply drag a behavior icon from a palette onto a graphic in your Composition window and fill out a dialog box.

If you want to go beyond the basics, Katabounga features a full scripting language called Bounga—it's powerful but

difficult to learn. This language gives you almost total control over every aspect of your project. You can pass messages between sprites and behaviors, and you can create complex IF-THEN conditions.

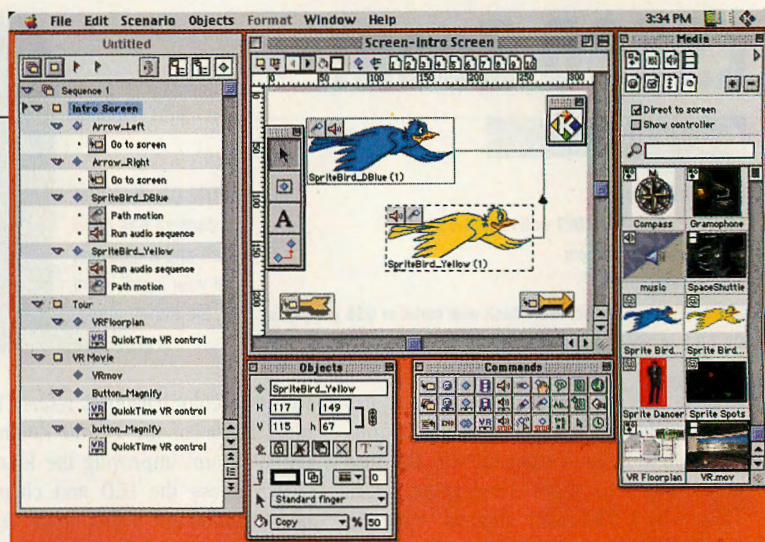
Katabounga has a lot of great features, but we can't recommend this product because it has a few serious flaws. You can play back projects created in Katabounga on either a PC or a Mac—a definite plus. However, Katabounga doesn't create self-contained projects—the media elements must go into an external folder. Lose this data folder and your project no longer works. This might sound like a frivolous complaint, but if you don't have 100 percent control over the delivery mechanism, people will misplace the media folder, especially if they're downloading files off the Internet.

One last problem is that unlike other QuickTime-based authoring products, Katabounga has separate Mac and PC run-

times, so if you're creating a PC version, you'll need to test it on that platform. Comparable products such as Totally Hip's LiveStage Pro (<http://www.totallyhip.com>) create a single QuickTime movie in run-time that works on *any* QuickTime-supported platform.

Perhaps the biggest flaw is that Katabounga has no means of Web delivery—and these days most people deliver their multimedia work via a Web page. The program also puts up a big "Made with Katabounga" logo onscreen when users leave. You can remove this screen by deleting a file from the Data directory, but the developers shouldn't have put it there to begin with. To top it all off, the documentation, though extensive, is badly organized and written, so you'll probably spend a lot of time just figuring out the app's basics.

Despite Katabounga's friendly interface, good functionality, and cross-platform capabilities, we can't really recommend this program. If you're prepared to ignore Katabounga's run-time issues, poorly designed manual, and lack of Web delivery capabilities, you can create compelling projects in other applications far less flawed than this one.—Rick Sanchez



BYE-BYE, BIRDIE: Katabounga can run your project anywhere using PC- and Mac-specific executables built from your Macintosh file.

Make It Easy for Me

Want Katabounga to go to work for you? The Assistant feature performs such functions as importing and separating the layers of an Adobe Photoshop document, as well as setting up slide shows. Button creation is also a snap: Just create a new button in the Media palette. Double-click the container—it presents you with a simple interface for selecting graphics to create mouse up, down, and rollover states.

FIND ALL YOUR MEDIA
easily with the Media
palette. Sort media by
file type and create
buttons with rollover
states based on any of
several different pictures.



GOOD NEWS: Author a project once, run it anywhere. Good visual interface. **BAD NEWS:** Poor documentation. No Web delivery of projects.



reviews

Details 3.0

PRODUCTIVITY

COMPANY: AEC Software

CONTACT: 800-346-9413 or 703-450-1980,

<http://www.aecsoft.com>

PRICE: \$299 (SRP), \$99 upgrade for users of Details 2.0

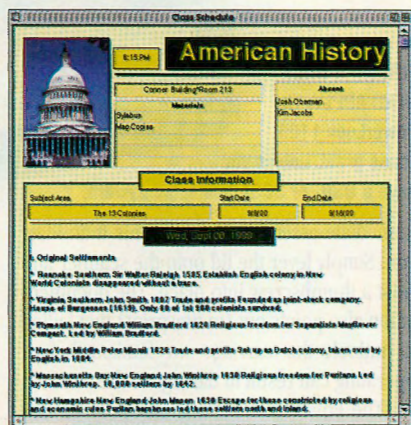
REQUIREMENTS: PowerPC or faster, Mac OS 8.1 or later, 4MB of RAM, 10MB of free hard disk space, 2X or faster CD-ROM

Billed as a project information manager, Details 3.0 turns out to be a database with project management features. This combo could come in handy, but Details doesn't fulfill either function especially well.

Aimed at the personal and small-business markets, Details comes with dozens of preset templates covering situations from construction to home recipes. Designed particularly for time management, Details produces simple Gantt charts showing scheduled times for specific tasks. Its reasonable system requirements let it run on almost any Power Mac.

Details walks you through an easy process for creating databases and forms. Generating preset reports is also a snap; a new report takes more effort. The helpful Report Generator updates reports as users enter data.

So how does Details stack up against FileMaker Pro, the current leader in the database software field? FileMaker has Web publishing and formatting capabilities. Although Details offers time-management features and oodles more templates, it's so



DETAILS OFFERS an easy way to store your data.

easy to make custom forms in FileMaker that the templates don't offer much advantage.

Alternating between forms and reports could be easier, and Details lacks keyboard shortcuts. Considering that its makers are trying to convince you to switch from other programs, the import feature leaves a lot to be desired. You can't import FileMaker Pro 5 data, though Excel files sometimes work.

Details isn't a bad program—it's just not outstanding. Its added time management features aren't enough enticement to lure us from FileMaker. —Mark D. Shuchat-Marx

GOOD NEWS: Easy to use. Lots of templates. Reasonable system requirements. **BAD NEWS:** Some complex features. Importing needs work.



Class Schedule											
All Classes/Fall Semester 1999											
Class Title	Subject Area	Start Date	End Date	Sept 10	Sept 17	Sept 24	Oct 1	Oct 8	Oct 15	Oct 22	Oct 29
1 American History	The 13 Colonies	9/8/99	9/17/99								
2 American History	The 13 Colonies	9/8/99	9/17/99								
3 American History	The 13 Colonies	9/8/99	9/17/99								
4 American History	The 13 Colonies	9/8/99	9/17/99								
5 American History	The 13 Colonies	9/8/99	9/16/99								
6 American History	The Continental Congress	9/20/99	10/1/99								
7 American History	The Continental Congress	9/20/99	10/1/99								
8 American History	The Continental Congress	9/20/99	10/1/99								
9 American History	The Continental Congress	9/20/99	10/1/99								
10 American History	The Continental Congress	9/20/99	10/1/99								
11 American History	War for Independence	9/20/99	10/1/99								
12 American History	The First Presidents	10/4/99	10/15/99								
American History	The First Presidents	10/4/99	10/15/99								

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reviews

Powerlook 1100

HARDWARE

COMPANY: Umax

CONTACT: 208-552-7980, <http://www.umax.com>

PRICE: \$999 (SRP)

REQUIREMENTS: FireWire-enabled Mac, Mac OS 8.6 or later, one free FireWire port

FIREWIRE ONLY

NEED APPLY: The PowerLook 1100

scans great, unless you have a USB- or SCSI-connected system.



PHOTOGRAPH BY AARON LAUER

Scanner technology has presented the consumer and the professional with perhaps the largest price gulf of any computing technology. Prices range from approximately \$70 to \$3,000, and yet the leap in performance is never quite as exponential as the cost. In a veritable zoo of scanners, Umax presents a pretty unique animal in the Powerlook 1100. It's a sharp and sensible solution for budget-minded publishing and design professionals.

This scanner's specifications put it square in the center of Umax's line of professional flatbed scanning equipment: 1,200-by-2,400-dpi resolution with a 10,600-element trilinear CCD, and an effective 42-bit output using Umax's patented BET (Bit Enhancement Technology). The Powerlook 1100 scans documents up to 8.5 by 11.7 inches and transparencies up to 8.5 by 10 inches.

Physical setup is remarkably quick and simple, thanks to the friendly FireWire interface and Umax's propensity for sensible design. Curiously, the Powerlook 1100 is available only with a transparency lid (no flat, white document lid), so it requires some

immediate assembly. Don't let this intimidate you. Simply lever the lid onto the scanner and twist a thumbscrew into place. The documentation also points out (in tiny print) that failing to unlock the carriage mechanism before operating can result in damage to the scanner.

The Powerlook 1100 is currently Umax's only professional FireWire scanner—and it's FireWire *only*. The FireWire interface and cable certainly make for a cleaner, happier office, but in terms of scanning speed, a big file leaves you twiddling your thumbs. Scanning speed has as much to do with the carriage motor—and the onboard processing—as with the data transfer between the scanner and the Mac. If you're expecting the exponential speed increase you may have glimpsed while using FireWire DV apps, don't hold your breath. Slides and flat art preview in brief seconds, but a 1,200-dpi scan of a 35mm transparency took 3 minutes, 24 seconds.

In our tests, we found that some scans took twice as long as the benchmark results Umax claimed. A 24-bit, 8-by-10-inch reflective scan at 600 dpi took our test machine 1 minute, 52 seconds to preview, but Umax came up with a

result of exactly 1 minute for the same task. That said, other considerations—processor speed, RAM, even OS variations—can make a difference in speed tests. For the record, we tested with a G4 350MHz processor, as opposed to Umax's 400MHz system.



THIS 1,200-DPI SHOT OF MACADDICT'S OWN CATHY LU, presented raw, needs remarkably little color correction.

The noise level during operation is staggering—not only in volume, but also in range, pitch, and timbre. A fluttering whine that builds to a buzzing crescendo heralds the switch between color calibration and actual scanning; it sounds strangely like an early eighties arcade machine. This soon began to grate on us.

In terms of convenience, the scanner ships with some handy features, including the option to link multiple Macs to one scanner. The enclosed transparency adapters make batch scanning a pleasure—the scanner autodetects the adapters and lassos the appropriate area. Even if you're scanning a single slide, it makes sense to use the adapter. In the end, we found the Powerlook 1100 a great—if compromised—solution for publishing and design professionals in a hurry who don't have a drum scanner in the office.—Frank O'Connor

Bundle Up for Summer

Umax offers four software bundles with the Powerlook 1100. We reviewed the Duo Design bundle, which includes MagicScan scanning software, Caere OmniPage LE (a fairly high-end OCR package), Photoshop LE, a Photoshop TWAIN-compatible plug-in, and Binuscan color-correction software. At \$999, it's a good value. The Design Mac bundle (\$1,399) and Pro Design Mac bundle (\$1,799) both include Photoshop 5.5. Umax says it's the first scanner company to bundle the full version of this product. The Pro Design Mac bundle also comes with Cumulus 5 Single User asset-management software. For a whopping \$2,099, the Photo/Prepress bundle comes with high-end PowerColor scanning software for drum scanning, as well as Cumulus 5 Single User. As of press time, the only software boost available is the \$499 upgrade from the ProDesign to the Photo/Prepress bundle.



A USEFUL SOFTWARE FILTER HELPS ERADICATE moiré patterns, which occur when you scan previously published halftone art.

GOOD NEWS: Spectacular color interpretation. Worry-free transparency scanning. Publishing-friendly prescan options. **BAD NEWS:** Bulky and noisy. Expensive for its resolution.



reviews

UpdateAgent 8

UTILITY

COMPANY: Insider Software

CONTACT: 800-700-6340 or 760-804-9900,

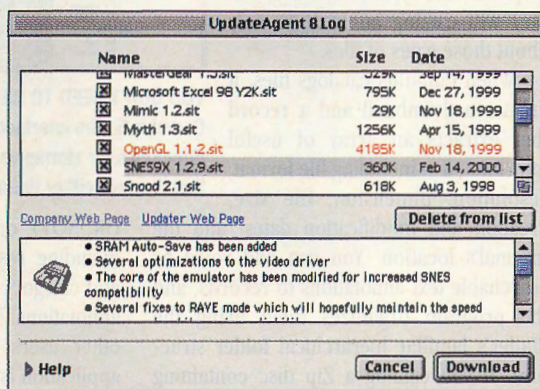
<http://www.insidersoftware.com>

PRICE: \$29.95 (one-year subscription), \$9.95 (one-time use)

REQUIREMENTS: System 7.1 or later, 16MB of RAM, 2.1MB of free hard disk space plus space for downloaded updaters

We bookmark Mac-related sites and we visit Version Tracker (<http://www.versiontracker.com>), so we assumed all our software was up to date. We were in for a surprise, however, when we ran Insider Software's UpdateAgent 8.

UpdateAgent 8 compares software on your hard drive with Insider Software's online database of thousands of major software and freeware game titles—from utilities to Apple System Files. The application then displays a list of every updater you need—ready for download from Insider's servers. Once you've got the updates on your hard drive, it's up to you to install them. Version 8 is a sizable revamp from the last go-round, UpdateAgent 3. This new version recognizes software updates for specific machines (it



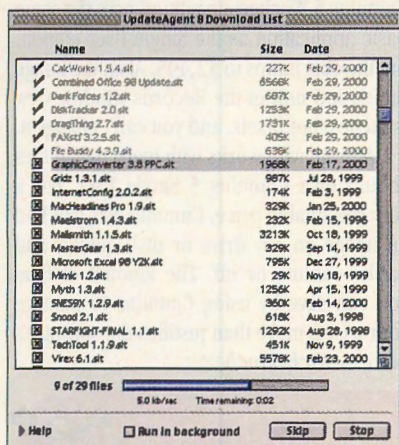
DON'T LET YOUR MAC GET CAUGHT wearing last season's software. The log window lets you connect to the updater's Web page with a click.

can distinguish between iMac revs) and Mac OS versions.

UpdateAgent's Log displays information about each updater, even quoting its ReadMe file. You can also set UpdateAgent to run automatically at night and even set it up to seek out and download beta versions of your software. The preference settings dialog lets you specify which files, if any, it should never update.

We have some minor quibbles, though. UpdateAgent didn't have sufficient intelligence to realize when our TCP connection had broken, and the application's sound effects were jarring and hornlike, though easily turned off.

Yeah, we thought our Mac was up to date, but UpdateAgent found more than 20 applications heading toward the stale side. We plan to run UpdateAgent at least once a week. For a more stable Mac, \$30 a year is a bargain.—*Joseph O. Holmes*



THE DOWNLOAD LIST WINDOW DISPLAYS LOTS OF INFO and lets you select which files to download. Skipped files can be downloaded later if you like.

GOOD NEWS: Finds tons of outdated software. Easy to schedule.

Configurable. Accurate.

BAD NEWS: Doesn't recognize broken Internet connections. Nasty sound effects.



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reviews

Cumulus 5 Single User

PRODUCTIVITY

COMPANY: Canto

CONTACT: 415-703-9800, <http://www.canto.com>

PRICE: \$99.95 (SRP)

REQUIREMENTS: Power Macintosh, System 7.1.2 or later, 4MB of RAM, 10MB of free hard disk space, CD-ROM drive

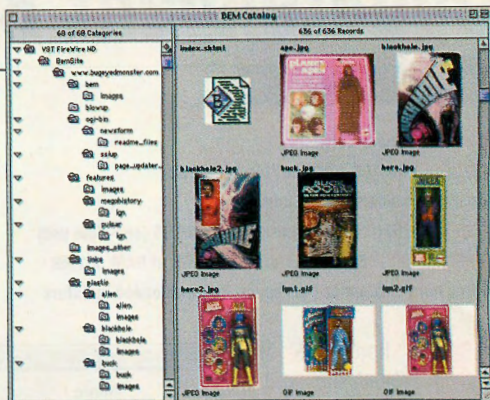
If you work with a lot of digital media, Canto's Cumulus 5 Single User will help you maintain your sanity. This asset management application lets you catalog almost any digital asset—be it a text file, QuickTime movie, GIF image, MP3 file, or Photoshop document. The beauty of Cumulus 5 is apparent in the ease with which you can create searchable databases to retrieve information about your files in a customizable record.

Cumulus 5 Single User is designed specifically to allow Web designers or small production groups using one computer to organize, find, and retrieve digital files (called assets). Cumulus can catalog any asset you can access from removable media, your hard drive, or a network server. If the program doesn't recognize a file type, click the Add button in the Catalog Options window to add it. Setting up filters to search for

a specific file type (GIF, for example) will catalog information only about those types of files.

When Cumulus catalogs files, it creates a thumbnail and a record that extracts an array of useful information—including file format, resolution, dimension, file size, creation and modification dates, and the original's location. You can add voice or searchable text annotations to records, and the program organizes them using the Finder's familiar hierarchical folder structure. If you catalog a Zip disc containing several nested folders, Cumulus mirrors that structure in the new catalog.

The strength of the cataloging tools alone would earn Cumulus a *Spiffy*, but its record-manipulation features justify a *Freakin' Awesome*. Perform searches based on specific criteria, use Boolean operators (AND,



YOU DON'T NEED TO BE A SUPERHERO to learn Cumulus 5. The interface works a lot like the Finder, with directories for storing your assets and a Records window that displays either thumbnails or a detailed text listing.

OR, NOT), or turn off any field in a record, including resolution, creation date, name, and category. You can also search your text annotations. The ability to email assets to other users on demand from within the application is key. Cumulus can also publish your catalogs as HTML files on the fly. The pages look just like the Catalog view, and the preview thumbnails are compressed JPEGs. Write the HTML pages to a CD and you can give anyone your catalogs to review.

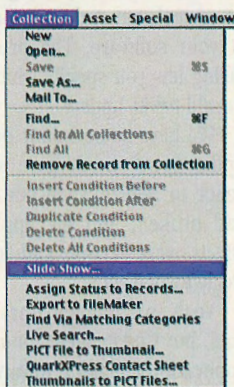
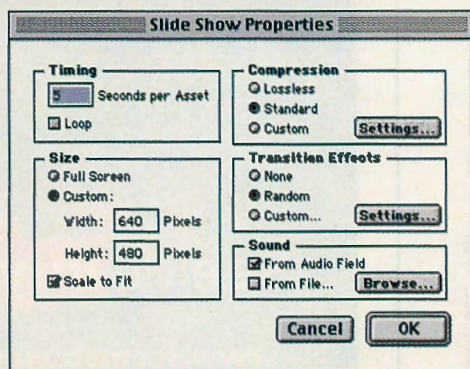
The one problem with Cumulus 5 is that you may outgrow the Single User edition's functionality, given the collaborative nature of Web design. Canto sells access to FTP servers, dynamic Web publishing modules, and workgroup functionality separately, bumping up the price significantly. The Cumulus 5 Workgroup edition uses the same basic application as the Single User edition, but the cost jumps to \$2,495. Also, the image dimension unit in the Records window view is inches, not pixels, and you can't change it.

Anyone who works with many digital files should own Cumulus 5 Single User. For a very reasonable price, Cumulus lets you find an image on any drive or disk quickly and easily—online or off. The amount of time you can save by using Cumulus to manage your assets more than justifies the software's price.—Rick Sanchez

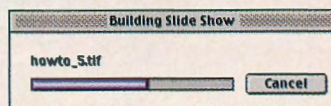
The Electric Slide (Show)

File management may not spell excitement, but Cumulus 5's ability to create QuickTime slide shows (with soundtracks and voice annotations) is entertaining.

- 1 Catalog your files using Cumulus and arrange them in the record window in the desired playing order.
- 2 Select all your files and choose Slide Show from the Collection menu.
- 3 Choose your slide show settings: duration, screen size, transition, and audio files, if you want them.



- 4 Click OK and Cumulus will create your presentation. Save it as a QuickTime movie or email it to another user in that format—you're done.



GOOD NEWS: Low system requirements. Easy to use. Powerful search functions. HTML export.
BAD NEWS: FTP server access not included. You can't change units from inches to pixels in detail view.



reviews

BellStor Eclipse FireWire CD-RW

HARDWARE

COMPANY: Bell Microsystems

CONTACT: 800-800-1513

or 408-451-9400,

<http://www.bellmicro.com>

PRICE: \$460.95 (SRP),

\$479.99 (street)

REQUIREMENTS: Any

FireWire-equipped iMac DV,

Power Macintosh,

or PowerBook



PHOTOGRAPH BY AARON LAUER

Bell Microsystems' BellStor Eclipse FireWire 8X4X32 CD-RW drive is part of the first wave of FireWire peripherals. This is one raging-fast drive. However, until the bundled software catches up with the hardware, you'll have to endure a few workarounds.

The Eclipse uses the PlexWriter 8/4/32A for its actual drive mechanism, and ships with Adaptec's Toast 4.0 LE CD-burning software. Toast does not support native FireWire connections, so Bell includes special software from Indigita that creates a phantom SCSI bus for the FireWire drive. Toast then recognizes the drive as a SCSI drive. Toast 4.1 should have native FireWire support (see "The 411 on Toast 4.1," below). Installation is simple—just plug in the drive with the included cable, install Toast and the Indigita drivers, and you're

BURN AT THE SPEED OF FIRE with the almost-glamorous BellStor Eclipse FireWire 8X4X32 CD-RW.

ready to burn CDs at amazing speeds. Creating a full 650MB CD at 8X took an amazing nine minutes, compared to 36 minutes on a 2X USB drive. Wow!

The Eclipse does have its foibles. Since the Toast CD Reader software does not support FireWire, you have to resort to a workaround. Launch Toast and choose Mount CD-ROM from the menu. Quit Toast and the drive will work as a reader until you restart. Annoying, but minor. To play audio CDs, you must route the audio signal from the drive's external RCA jacks. Plus, the ugly beige Plextor drive sticks out of the attractive blueberry-and-ice enclosure, which makes the whole thing look a bit like an afterthought.

Also annoying is that the version of Toast included with the drive is a limited version. It doesn't allow you to burn copies of Mac volumes or ISO 9660-formatted disks—instead, you're limited to files and folders. You can, however, upgrade your version of Toast to address this issue.

Toast 4.1 will no doubt fix several of these gripes. So if you're craving a FireWire CD-RW drive, put this one at the top of your list.—*Buz Zoller*

The 411 On Toast 4.1

By the time you read this, Adaptec should have posted the Toast 4.1 update (free for 4.0 users) to its Web site (<http://www.adaptec.com>). The new rev sports a slight interface change, but the real power is under the hood, so to speak. Adaptec has consolidated about 22 different extensions for compatibility with different types of drives into effectively three: built-in SCSI, USB, and now native FireWire support for about 20 major drives. Check Adaptec's site to ensure that your CD-RW drive is on there, though most likely you'll be plugging and playing with the best of them.

GOOD NEWS: Superfast 8X recording. Easier setup than for SCSI drives. **BAD NEWS:** Toast CD Reader will not mount drive. Ugly beige drive underneath great external case.



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power play

It's our last Unreal Tournament article for a while—we swear!

The Last Unreal Show

Our Visual Guide to One of the Most Engaging Unreal Maps Around



I TALK SOME SMACK to your fellow Mac Unreal-ites in the MacAddict forums at <http://www.macaddict.com>.

The MacAddict staff's favorite level in Unreal Tournament is Facing Worlds. This Capture the Flag map promises plenty of action, especially if lots of players join in. Here's our visual guide to Facing Worlds. We've included a four-step path to return the flag and confuse your enemies, as well as four tips you should know about to maximize your prowess.—*DR*

STEP 3. Slide down one of these pillars to land in the enemy's Redeemer chamber. If you're careful, you can get to this point without receiving any damage.

TIP 2: DAMAGE AMPLIFIER (in upper part of entrance)—A great place to sit with the rocket launcher or sniper rifle and pick off incoming enemies.

TIP 4: SNIPER PERCHES—Snipe from the enemy's tower to stay hidden and confuse them.

STEP 1: When you get the flag, use the teleporter to get to the top of the tower.

STEP 2. Leap from ledge to ledge until you leap over one of the four slanted pillars on the front of the tower.

STEP 4. Jump to the ground in front of the tower and zigzag like a maniac in a desperate dash for your castle.

TIP 1: BIG KEG O' HEALTH—Don't let this fall into enemy hands. Pick it up on the way back to your base, if you can.

TIP 3: REDEEMER—To clear the main hall, get the enemy's Redeemer, step through the teleporter, fire it, then step back before it goes off.

Aspyr Announces Three New Titles

The Sims, Deus Ex, and Tomb Raider: The Last Revelation on the way

After wrapping up production on Sid Meier's Alpha Centauri, you would think that Aspyr would pop open a cold one and kick back for awhile on the back porch. Not so—the Puritan work ethic runs strong through these folks, and that's why Aspyr will soon be treating us to three (yes, three) new game titles, and they're all big names: Deus Ex, The Sims, and Tomb Raider: The Last Revelation. While final ship dates haven't been set yet, expect these titles to come out very soon.

With Deus Ex, think Rainbow 6 meets Unreal Tournament meets Diablo. This first-person role-playing game is set in the future where terrorists, disease, and pollution are wreaking

IT'S BIG, IT'S MEAN, and it'll squash you like a bug. That's why it's sometimes better to use stealth over strength in Deus Ex.



havoc on the world's population. You play an anti-terrorist agent aided by the latest in augmentation technology, and it's up to you to determine strength or stealth is the appropriate approach as you work to solve a deep, dark mystery.

The Sims—already tremendously popular on the PC side—takes a fatty zoom lens to Sim City and lets you meddle in the lives of the virtual denizens living inside your computer. Those with voyeuristic tendencies and a God complex are gonna love this one. You can provide benevolent influence, or you can try to warp your Sims. We know what you're going to do.

Finally, Tomb Raider: The Last Revelation is the latest release in the Tomb Raider franchise. Not much has changed here, except that Lara has been reskinned and she unknowingly releases the evil god Set. Oops. Guess she'll just have to prevent the end of the world—with your help, of course.—*DR*



SURE, IT LOOKS like any cocktail party, but these virtual revelers may very well be plotting to overthrow the world—or perhaps they're just talking about *The Sixth Sense*.

power play

Marathon Gets Opened

OpenGL, That Is

Bungie's decision to release Marathon code as open source has already borne fruit. Aleph One 0.9.1, released in early April, adds OpenGL support to the venerable first-person shooter. While this doesn't bring Marathon up to the level of Quake 3 or Unreal Tournament, it *does* bring new life to the game's graphics. An active group of folks is working all the time to add new and interesting features to Marathon, so if you're interested—and willing to walk the bleeding edge—go to <http://source.bungie.org> for the latest.—*DR*

ALL RIGHT, who burned the popcorn? I can't see a thing in here.



Screen Shot of the Month

If you want your shot at 15 minutes of fame and glory, send your screenshots to letters@macaddict.com, and you may achieve immortality—or maybe just get your name and screen shot in a magazine. And remember, folks—speed kills.



Artist's Statement

Yes! I have achieved pod racer speeds of over 1,000 miles per hour! I can do anything! Ah ha ha ha! Yep, and I did it all on the demo version of Star Wars: Episode I Racer that came on The Disc (Mar/00). I didn't even crash or get an engine fire. Oh, and for lots of cheats, strategy, and so forth, get the full version at <http://www.podracers.com>.—*Jacob Jackson*



how to

Look out! It's the attack of the 50-foot, colossal, how-to section!

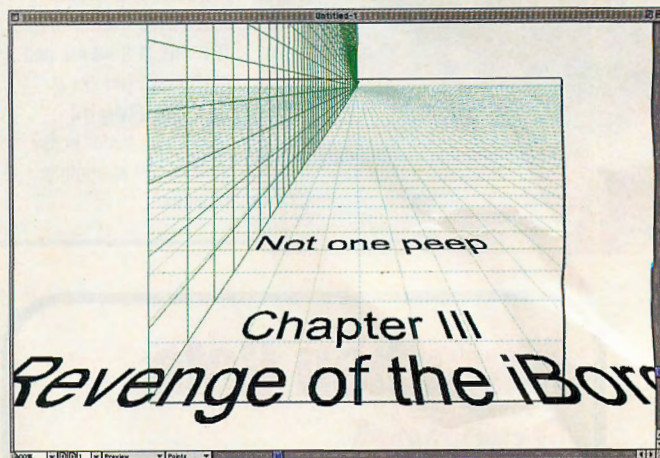
Title Your Movies with FreeHand 9

by Ian Sammis



Ever since the release of the original *Star Wars* in 1977, the perspective scroll has been one of the most instantly recognizable titling tricks in existence. Thanks to a host of new features in Macromedia's (<http://www.macromedia.com>) FreeHand 9, and a bit of help from QuickTime Pro's video editing features, you can now add the same effect to your own QuickTime movies.

While making a movie in a vector graphics application sounds strange, Macromedia has grafted a number of useful new features onto FreeHand 9 that make it quite possible. The Perspective Grid lets you turn graphics designed on a flat 2D grid into perspective drawings that narrow correctly with distance. Better yet, FreeHand can now export Flash movies, letting you create simple animations without a more advanced program like Flash or Director. Here's how to use all these tricks to make a simple QuickTime title sequence.



JUST WHEN YOU THOUGHT IT WAS
safe to watch a staff video...

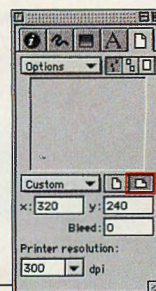
WHAT YOU WILL NEED

- FreeHand 9
- QuickTime Pro

1 Get into the Right Frame

QuickTime movies come in an astonishing variety of sizes, most much smaller than FreeHand's usual letter-size pages. To change FreeHand's page size, select Document from the Modify menu. In Inspector, choose Custom from the pop-up menu, then set x to 320 and y to 240 (or a size appropriate for your movie—our staff videos are 320 by 240). Click the Landscape button on the right—QuickTime movies are wider than they are tall.

MAKE SURE TO CLICK THE
LANDSCAPE BUTTON
in Inspector—if you don't,
FreeHand will assume you
want the document 320 pixels
high and 240 pixels wide!

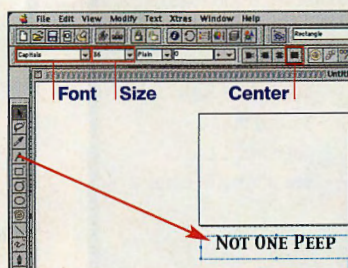


LANDSCAPE
BUTTON

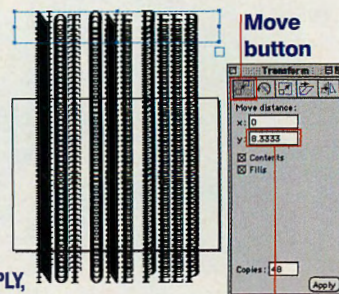
2 Titles Up!

With the Text tool, create a text block just below the window. Set Size to 36 points, and pick a suitably dramatic font. Type a title for the movie, then set Align to Center.

After you create the title, select it. If you don't see the Transform panel, select Transform from the Window menu. Click the Move button on the Transform panel. You want the text to cross the window and go off the top. Normally, this would require moving it just over the 240 pixels that separate the top and bottom of the movie, but when you put the text into perspective you'll have to move it quite a bit farther. To move the text 400 pixels over 48 frames, type "400/48" in the y field, and set Copies to 48. When you click Apply, you should have a column of overlapping titles.



FIRST CREATE THE TEXT
using the Text tool and a nice
dramatic font.



WHEN YOU CLICK APPLY,
FreeHand does the necessary division.

$400/48 = 8\frac{1}{3}$



FIND A
FREEHAND
demo on
The Disc.



TELL US YOUR
TITLING tricks
at [http://www
.macaddict
.com/debate](http://www.macaddict.com/debate).



TOUGH
This stuff's for
the pros.



TRICKY
It'll take some
effort, but you
can do it.

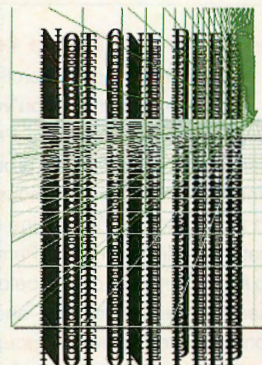


EASY
The fundamen-
tals, if you will.

3 Put Things in Perspective

Now you're ready to use the Perspective tool to make the scroll work in proper perspective. First select Show from the Perspective Grid submenu of the View menu. You should now see the Perspective Grid.

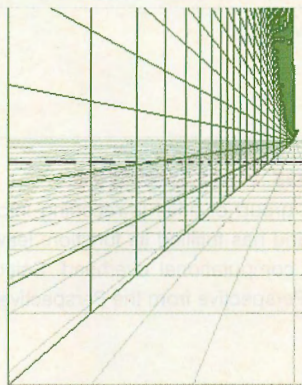
THE PERSPECTIVE GRID
is now visible in the
background of the image.



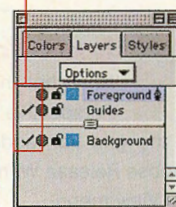
4 Out of the Foreground

At the moment, the vanishing point is off to one side of the document (in letter-size mode it's centered, but a QuickTime movie is considerably narrower than a typical page). If you try to fix that now, though, the text column will get in the way. Select Layers from the Panels submenu of the Window menu to bring up the Layers panel. At this point you should see three layers—one for the background, one for the foreground, and one for any guides you might create. Deselect the check box next to the foreground layer to hide the text column.

WITH THE
FOREGROUND
hidden, you can
easily see the
Perspective
Grid.

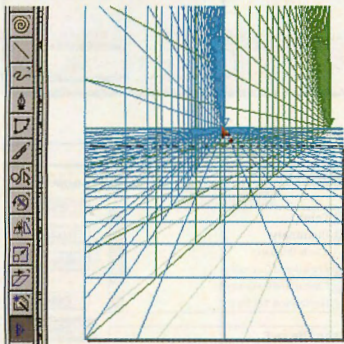


CLICK HERE to
toggle layers on
and off.

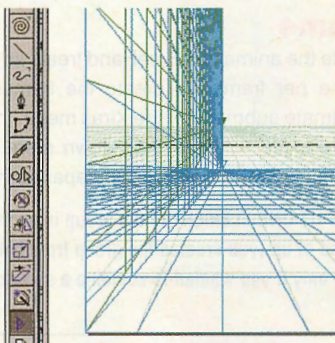


5 Point of No Return

Using the Perspective tool, move the vanishing point to the center of the document by dragging the triangle. Next, move the horizon to the line toward which you want the text to move. Remember that the text will become extremely small long before it actually reaches the horizon.



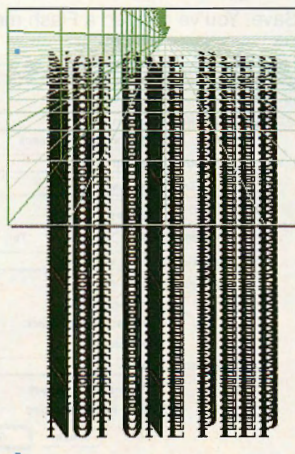
WHEN YOU'RE DIRECTLY
OVER THE VANISHING
POINT, the cursor should
sport a small diamond.



TO GRAB THE HORIZON,
move the mouse until the
cursor shows an upward
arrow pointing at a line.

6 Get into a Group

Select the check box next to the foreground layer in the Layers Panel to make the foreground visible. Select all the titles in your column by dragging around them or typing Command-Shift-A (the usual Command-A won't work—that method selects only the text that actually lies within the frame). Select Group from the Modify menu to make the column a single FreeHand object. Drag the column of text so that its top sits near the horizon; this will put it closer to where you want it when you attach it to the Perspective Grid.

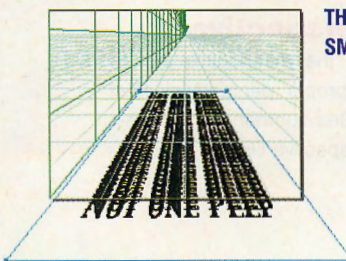


THE TEXT GETS MAPPED TO THE
PERSPECTIVE GRID based on its
location—if you left it where it
was, it would have appeared in the
extreme distance!

7 From Here to the Horizon

To have the text scroll to the horizon, you must make the column you've selected lie along the Perspective Grid. Click the Perspective tool in the tool bar, then click and hold on the group you created in the last step. While holding down the mouse button, tap the down arrow on the keyboard. The outline of the group changes to show that it now lies along the Perspective Grid. Move the group so its bottom extends just below the lower edge of the frame, then release the mouse—and wait. It may take FreeHand some time to redraw the group so it lies along the grid.

If you don't like the way the text vanishes, you can adjust the Perspective Grid as you did in step 4. As you do so, hold down the Shift key to keep the text locked to the grid.



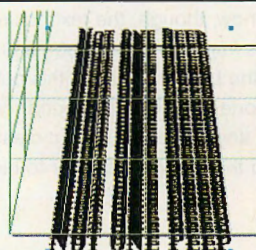
THE TEXT NOW RECEDES SMOOTHLY into the distance.

WITH THE HORIZON LOCATED far above the top of the frame, the text scrolls off the top of the frame as it recedes.



8 Lose Your Perspective

Now that the group of titles is receding into the distance, the Perspective Grid has fulfilled its function; leaving the group tied to the grid just adds computational overhead. Select the group, then choose Release With Perspective from the Perspective Grids submenu of the View menu.

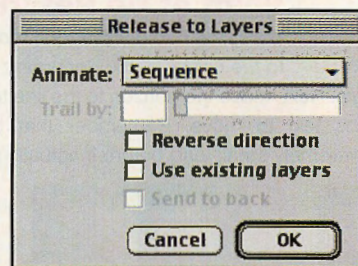


WITH THE TEXT RELEASED FROM THE GRID, the selection loses its perspective lines; the usual handles appear instead.

9 Frame by Frame

It's finally time to create the animation. FreeHand treats an animation as a succession of layers, one per frame. To create the frames you want, choose Release To Layers from the Animate submenu of the Xtras menu. In the dialog box that appears, choose Sequence from the Animate drop-down menu. The selection will change from 1 item to 49 as the elements of the group separate into layers.

SEQUENCE TELLS FREEHAND TO PUT ONE ELEMENT of the group in each frame. Reverse Direction would make the text move down instead of up (you created the group from bottom to top back in step 2), while you'd pick Use Existing Layers only if you wanted to combine a second animation with an existing one.

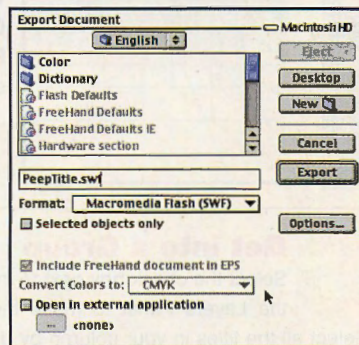
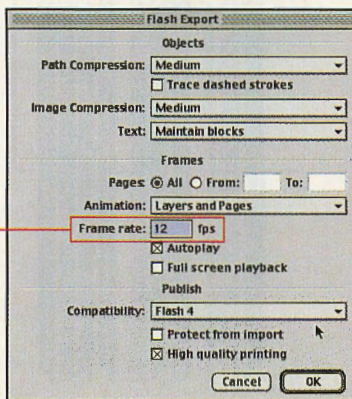


10 Flasher

Now that you've created every frame, it's time to export the finished Flash animation. Choose Export Document from the File menu. From the Format pop-up menu, select Macromedia Flash (SWF). If you want to change the frame rate, click the Options button, then type the frame rate in the appropriate field. When you've set the frame rate, click Save. You've created a Flash movie!

Frame Rate

FOR MOST ANIMATIONS, 12 frames per second is more than adequate, but you can reduce this number if you want to reduce the file size.



ALTHOUGH THE ADDITION OF THE FLASH format to FreeHand primarily has been marketed as a tool for Web printing, it's also quite useful for simple animations.



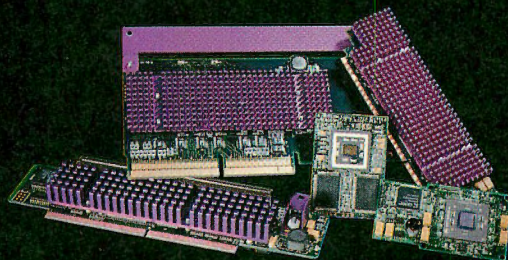
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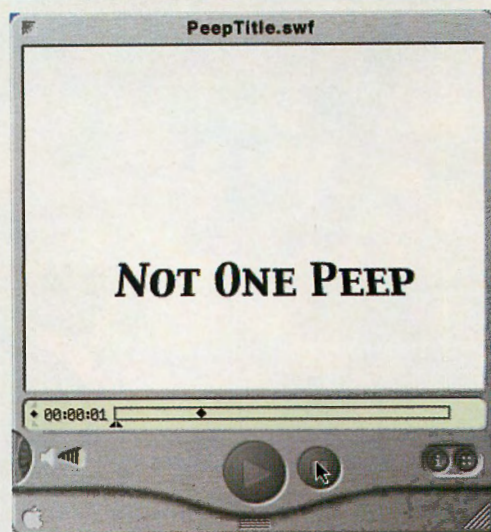
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11 Sneak Preview

Thanks to the wonders of QuickTime 4, Flash movies are simply one of the many formats QuickTime MoviePlayer can handle. Drag the movie to MoviePlayer to test it. You should see the text receding to the horizon line.

THERE IT IS—A PERSPECTIVE SCROLL, right in your QuickTime player. Don't you feel derivative?



12 QuickTime Pro Earns Its Keep

QuickTime Pro's MoviePlayer has another trick up its sleeve that's well worth the registration fee. The Pro version lets you combine QuickTime movies by simply dragging one movie onto another one you have open. Next, open the movie you want to title and drag the Flash file onto that window. MoviePlayer shows the two movies in sequence, leaving you with a properly titled movie.

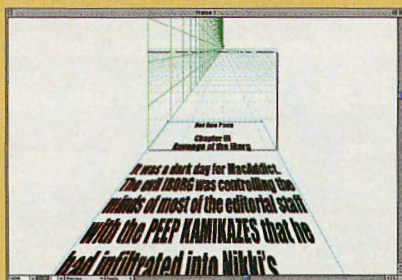
As soon as you release the mouse, you add the title to the final edition of *Not One Peep*.



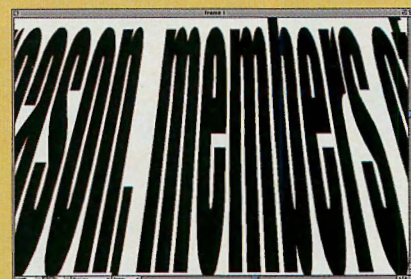
Ian Sammis recently ran out of desktop space for additional icons. He is now seeking out a monitor capable of higher resolutions.

Where's the Rest of the Text?

You might be wondering why we scrolled a single line across the screen—after all, the original *Star Wars* titles ran on for several paragraphs. Try following this how-to with a larger block of text, and you'll quickly see the problem: In perspective, text that lies far below the horizon in 2D becomes extremely distorted, eating up both processing time and the space on FreeHand's vast but finite palette. To add more lines, break up the scrolling text into short, manageable segments and animate each one separately. Turn to the Use Existing Layers box in the Release Into Layers dialog box to put the new animations in the same frames as the old ones.

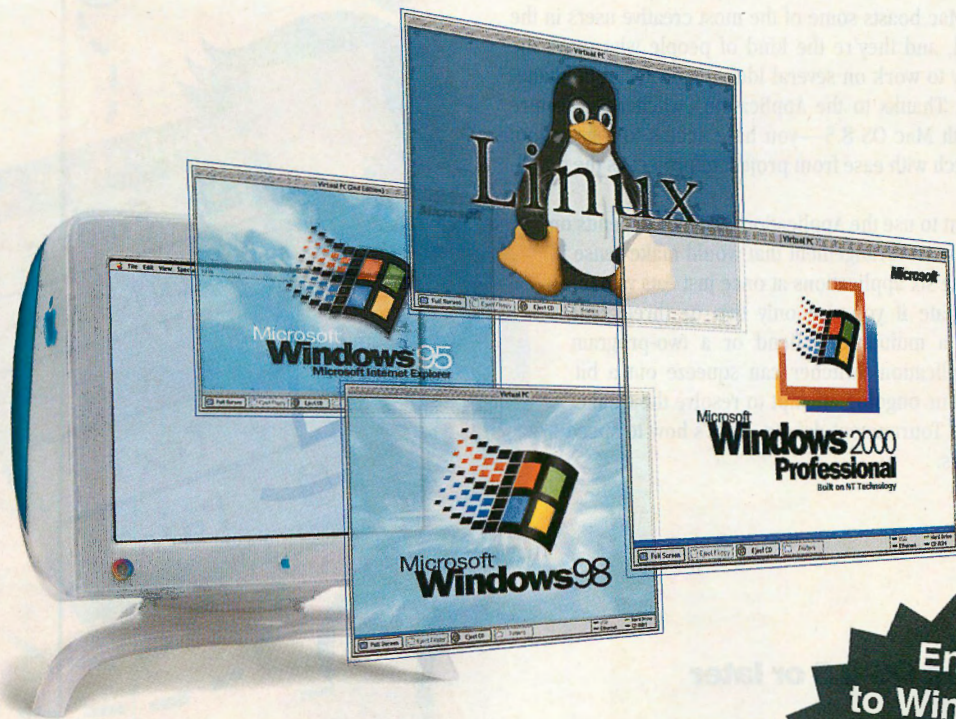


PROMISING START: This title sequence looks reasonable up here in the frame, but FreeHand won't let you slide it further down! Why not?



HERE'S THE PROBLEM—the text has simply become too large to handle.

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how to

Tap into App Switcher

by Jonathan Claydon



The Mac boasts some of the most creative users in the world, and they're the kind of people who crave the ability to work on several ideas or projects simultaneously. Thanks to the Application Switcher—a feature Apple added with Mac OS 8.5—you have access to a great tool that lets you switch with ease from project to project as the mood strikes you.

How you want to use the Application Switcher depends on your work habits. An arrangement that would make sense if you routinely use six applications at once just eats valuable monitor real estate if you use only two or three. Still, whether you're a multitasking fiend or a two-program wonder, the Application Switcher can squeeze out a bit more time for your ongoing attempt to resolve the Quake III versus Unreal Tournament debate. Here's how to speed up those switches.

WHAT YOU WILL NEED

Mac OS 8.5 or later



GOT OTHER SWITCHER TRICKS up your sleeve? Share 'em with the world at <http://www.macaddict.com/debate>.

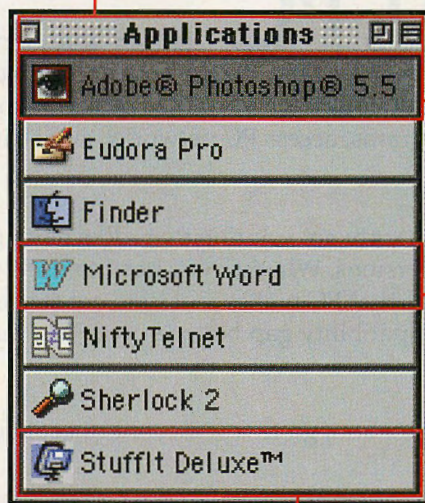


ILLUSTRATION BY NATHAN JUREVICIUS

1 Enter the Application Switcher

The easy-to-use Application Switcher can considerably speed up switching between apps. Most Mac users already have an intimate knowledge of the Application menu (in the upper right corner of the screen). To access the Switcher, click and hold while dragging downward, as if you were about to make a menu selection, but continue beyond the edge of the menu. After you pass its boundaries, a gray window outline appears. When you see this, release your mouse button, and the Application Switcher will make its appearance. For each app you're running, it displays a small icon with the name of the corresponding program to the right.

The unusual dotted texture on the title bar indicates that the Application Switcher floats above normal windows.



The deep-gray button indicates which program you're currently using.

A gray icon denotes an open but hidden application.

THE APPLICATION SWITCHER IS ONE OF THE MORE useful recent additions to the Mac OS.

A standard platinum button indicates a background application.

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Visit **www.fwb.com** for more information or to place your order for SoftWindows 98. While you're there check out **RealPC®** – the DOS version of SoftWindows 98 available for download for **just \$29.95** – or of course, the rest of the FWB family.



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MacMall
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Fry's
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Micro Center
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software

2 Custom Switcher Modes

You don't have to stick with the Application Switcher's initial look—while you may find the app names useful when you're using the menu, they usually present an obstacle in the floating window. If you click the zoom box, you can remove the names; click again to put them back. Option-clicking the zoom box toggles between large and small icons. If you prefer horizontal lists to vertical ones, Option-Shift-click the zoom box.

3 Somewhere Special

Once you've decided what sort of format you like, drag the window to an accessible spot on your desktop for efficient app switching. It's a good idea to put it somewhere far away from the actual Application menu—that way you can reach one or the other in a flash from anywhere on your screen. Although the lower-left corner of the screen seems like a natural candidate, that tends to put the Switcher in the way of your application windows—we recommend the lower right corner instead.



YOU CAN TWEAK THE APPLICATION SWITCHER into a variety of strange and unusual forms.

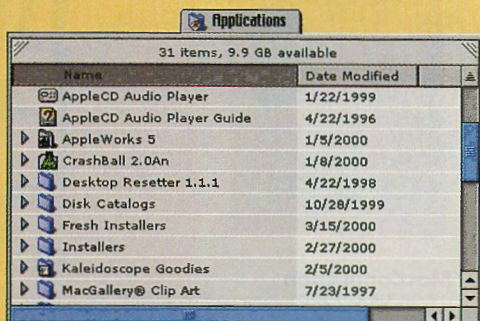


THE APP SWITCHER FLOATS ABOVE every other window on the system, so position it where it won't get in your way.

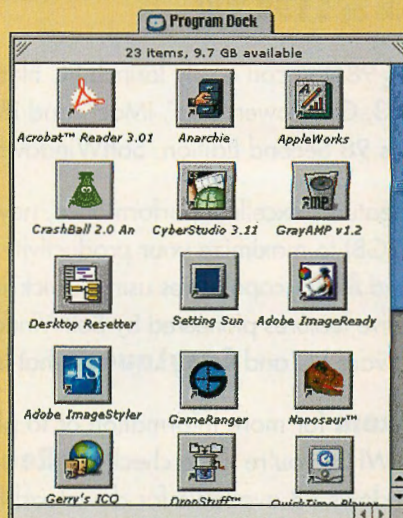
Using Tabbed Windows to Build a Better Launcher

While the Application Switcher is a great utility, it's not the be-all and end-all of Macintosh efficiency. Tabbed windows, a feature added in Mac OS 8, offer a way to launch any of your favorite applications fast without having to wind tediously to their folders.

Making a tabbed window is very easy. First locate any Finder window you use often or just want to access quickly. Drag it to the bottom of your screen. The outline of the window should change, indicating that if you let go, you'll get a tabbed window. Release your mouse button and you should see a new tab at the bottom of the screen. Just click the tab to spring the window open and shut. Drag files to the tab to slide the window open temporarily—as soon as you release the files, the tabbed window snaps shut. If you want to turn the tab back into a normal window, just drag it away from the bottom of the screen—when you reach the window's full height, it'll turn back into a normal window.



SIMPLY DRAG A WINDOW TO THE BOTTOM OF THE SCREEN and it stays out of your way—but remains readily accessible.



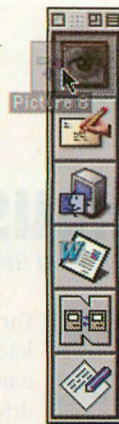
IN VERY LITTLE TIME you can re-create the Launcher with a little modern flair—and without obstructing your desktop.

You can use the tabbed window facility to make a better version of that nearly forgotten OS feature, the Launcher control panel. Start by creating an alias for each frequently used program. In the Applications folder, create a new folder called Program Dock. Open the folder, then drag its window to the very bottom of the screen to change it into a tabbed window. Place your aliases in the tabbed window and arrange them as you see fit. Control-click your new folder's window and select As Buttons from the View submenu. You end up with a pseudo-Launcher that works much better than the real thing—it stays out of the way until you need it.

4 Dragging Them On

The Application Switcher has one more trick up its sleeve: You can open a file in any of the apps you're running by simply dragging it onto the appropriate Switcher icon. This can come in very handy—if someone gives you a file from an application you don't have, using the app switcher to pick an alternative is much, much faster than going through the usual "which application do you want to use" window.

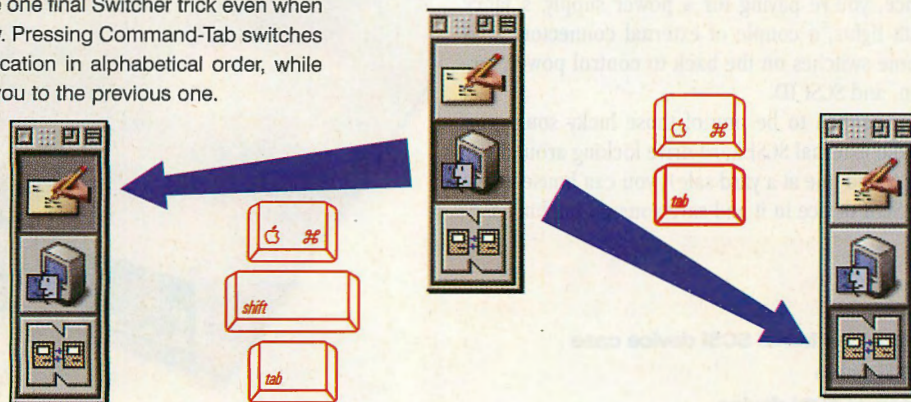
**DRAGGING
FILES ONTO
THE SWITCHER
is a quick way to
open them.**



5 Doing It by Hand

If you're running just two or three apps, the App Switcher's floating window gets in the way more than it helps. Fortunately, you can use one final Switcher trick even when you haven't torn off the window. Pressing Command-Tab switches you instantly to the next application in alphabetical order, while Command-Shift-Tab switches you to the previous one.

**PRESSING COMMAND-TAB
and Command-Shift-Tab is a
quick way to cycle through a
small number of apps.**



Jonathan Claydon (jonathan@macteens.com) has just moved from Tennessee to Texas. He serves as Webmaster for MacTeens.com, and is a moderator on the MacAddict.com forums.

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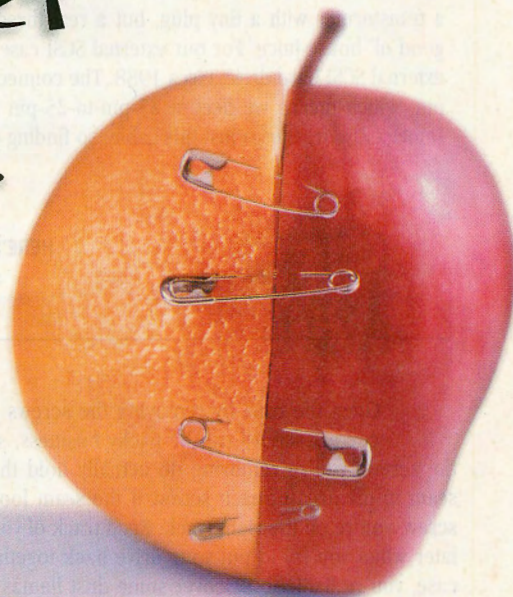
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how to

House a Homeless Internal SCSI Device

by David Reynolds



For years, a few well-informed people have known this truth, but it has generally passed unnoticed: Internal devices (such as hard drives and so on) actually cost *less* than external devices. That's because when you buy an external device, you're paying for a power supply, a fancy case with lights, a couple of external connectors, and often some switches on the back to control power, termination, and SCSI ID.

If you happen to be one of those lucky souls who have an old external SCSI hard drive kicking around (or if you've found one at a yard sale), you can house a new internal SCSI device in it and save yourself big bucks.

WHAT YOU WILL NEED

- Unused external SCSI device case
- SCSI cable
- Internal SCSI device
- Basic tools (such as screwdrivers)
- Basic understanding of SCSI



THIS MAY BE one of the ugliest DVD-RAM cases in existence, but it's also one of the cheapest.

PHOTOGRAPHS BY DAVID REYNOLDS



HOW COOL IS YOUR NEW SCSI CASE?

Log onto <http://www.macaddict.com/debate> and brag about it.

1 Choosing Your Victim

You want a case for a SCSI hard drive, preferably a box that can accommodate a half-height, $5\frac{1}{4}$ -inch device—big enough for CD-ROM drives and the like. The case should have a built-in power supply—not a transformer with a tiny plug, but a real three-prong direct connection to good ol' house juice. For our external SCSI case, we've cannibalized a 20MB external SCSI hard drive, circa 1988. The connectors on the back are both 25 pin, which means we need a 25-pin-to-25-pin SCSI cable—fortunately, the Iomega Zip drive uses just this cable, so finding one isn't too hard.

HERE'S A BLAST FROM THE PAST—a $5\frac{1}{4}$ -inch external hard drive.



2 Preparing the Patient

Open the case by removing the screws that hold it on. Finding the correct screws can be tricky business, so every so often make sure the screws you're removing do actually hold the case together: Pull at the seam in the area of each screw. If the seam loosens up after you remove a screw, you're on the right track. Keep track of your screws, or you'll regret it later when you try to put your drive back together. Once you've opened the case, you're liable to discover some dust llamas in there, so spray them out with a can of compressed air.

REMOVE THE RIGHT SCREWS—make the wrong choice and you'll detach the power supply or fan.



3 Beginning the Surgery

Now it's time to begin the surgery proper. Disconnect *any* connectors attaching the drive to the rest of the electronics in the case (most likely this includes a couple of SCSI cables, a power cable, a termination switch, and a couple of LED wires). Find the screws that hold the drive to the case and remove them. Finally, lift the drive out of the case and put it aside—you're probably not going to use it again.

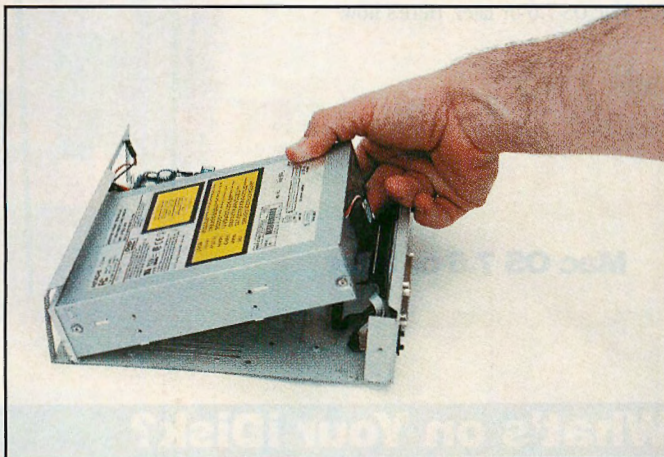


THIS DRIVE BELONGS in a museum—not on your desk.

4 Performing the Transplant

Once you've got the old drive out of the way, it's time to insert the new one. In our case, we're using a DVD-RAM drive—the ultimate in removable and reusable storage, capable of backing up a whopping 5.2GB of data per cartridge. Make sure you've set the SCSI ID jumpers properly, because you're not going to want to take this beast apart to change them. If this is your only external SCSI device, you can probably leave them in their default positions. If not, you should visit the drive manufacturer's Web site for jumper settings, or you can find them at <http://www.thetechpage.com>.

Place the new drive in approximately the same location as the old one. With any luck, all of the screw holes will line up and you can attach the new drive to the case using the same holes and screws that held down the old drive. If the new drive is a removable storage device, make sure the tray or door faces an opening in the case. If the case doesn't *have* an opening, it's up to you to make one.



INSERT THE DRIVE CAREFULLY—it's easy to cut yourself on the inside edges of the case.

5 Sewing It Up

Now that you've got the drive firmly in place, it's time to attach the cables. Connect the power cable to the drive's power port and plug the SCSI cable into the drive's SCSI port. These items are pretty standard, so you shouldn't run into any problems when you connect them. The SCSI ID switch and status lights are another matter. Unless you are *very* lucky and the two drives use identical fittings for these items, you shouldn't attach them. Still, even if you don't connect everything, it's no disaster—your drive will most likely work fine. Finally, put the drive's case back on, attach it with the original screws, and connect it to your Mac's SCSI port. Don't forget to terminate the device properly. Fire up your Mac and see how well you've done.

YOU MIGHT HAVE TO partially remove the drive to connect the cables.





how to

Create an iDisk...Without Mac OS 9!

by Owen W. Linzmayer



TRICKY

Introduced with great fanfare at San Francisco's Macworld Expo last January, iDisk is a new free service that provides 20MB of disk space on Apple's servers so you can store personal documents and share information with others over the Internet. When you connect to an iDisk, it appears on your computer's desktop just like any other disk. Although Apple insists you must have Mac OS 9 or later to take advantage of iDisk, with a bit of know-how you can create and use an iDisk on any Internet-connected Mac running Mac OS 7.6 or later. Here's how.

WHAT YOU WILL NEED

Mac OS 7.6 or later



ILLUSTRATION BY SHAG

What's on Your iDisk?

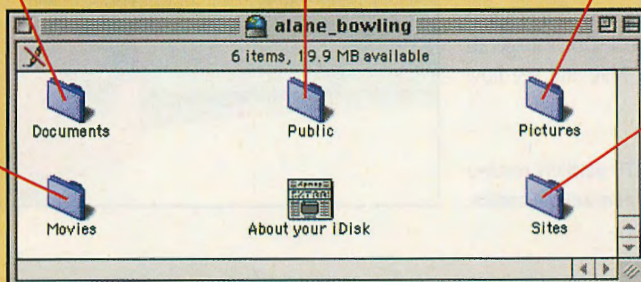
Once mounted, an iDisk looks and acts just like any other storage device on your Mac. You can double-click its window to reveal its contents and copy files by dragging them to the desired folder. A single iDisk can hold up to 20MB of files. At present, you can't obtain additional disk space, so if your iDisk starts to get full, you must delete files you no longer need by dragging them to the Trash. To unmount an iDisk, just drag its icon to the Trash; your files remain intact on Apple's server.

DOCUMENTS: Store whatever you want to keep private in this folder. You can access its contents from the Chooser of any Internet-connected Mac as long as you remember your member name and password.

MOVIES: Use this folder to store QuickTime or iMovie files for use with HomePage (requires Mac OS 9).

PUBLIC: Put whatever you want to share in this folder. Any Mac OS 9 user who knows your iDisk member name can view and copy—but not add, alter, or delete—the folder's contents by signing on through the iTools Web page. (You can't access anyone else's Public Folder unless you're running Mac OS 9.) Never reveal your password—others don't need it to access your Public folder.

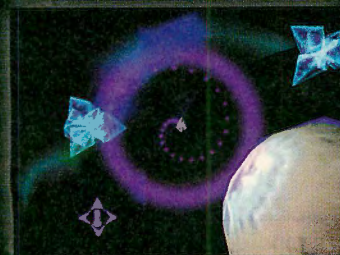
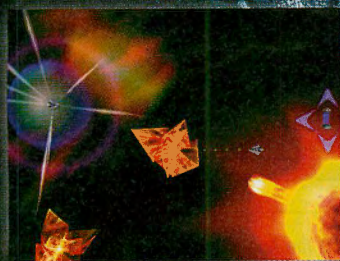
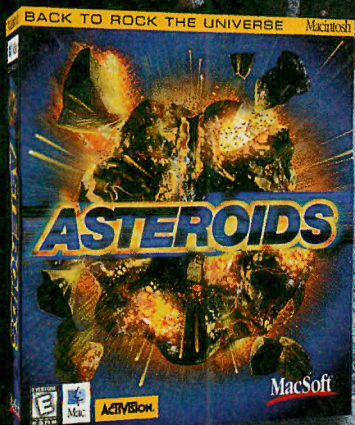
PICTURES: Store images (their format must be JPEG, with a file name ending in .jpeg) in this folder for use with iCards (electronic greeting cards) and HomePage (both these features require Mac OS 9).



EVERY IDISK COMES WITH A SIMPLETEXT document named "About Your iDisk" and five permanent folders.

SITES: Publish your own Web sites by putting HTML files in this folder. Anybody with a browser—including a Wintel user—can access your Web site at the following URL: <http://homepage.mac.com/membername/pagename.html> (replacing membername and pagename with your info).

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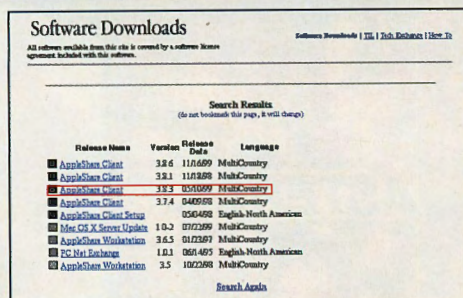
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Update Your AppleShare Extension

1 Get the Right AppleShare Client

To keep iDisks private, Apple uses DHX UAM (Diffie-Hellman Exchange User Authentication Module)—AppleShare 3.8.3 added this secure method of sending server passwords. In your Web browser, go to the Apple Software Updates page at <http://asu.info.apple.com>. Search for and download AppleShare Client 3.8.3. (Later versions require Mac OS 9.) Before quitting the browser, make sure you have the latest version of Open-Transport that will run on your Mac.

YOU'LL NEED THIS APPLESARE CLIENT
to connect to your iDisks.



2 Mount the Image

When the 6MB-plus download finishes, double-click ZM-AppleShare Client 3.8.3.smi to mount the Disk Copy image. A new disk icon should appear on your desktop.

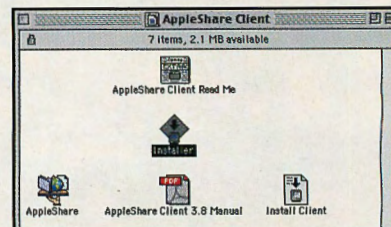


WHEN YOU DOUBLE-CLICK the self-mounting image file, it appears on your desktop just like an installed hard drive.

3 Install If You Can

Double-click the AppleShare Client disk icon. If you're running Mac OS 8.5 or later—or an international version of the Mac OS—simply double-click Installer and follow the onscreen directions. Otherwise, you should manually install the new versions of the AppleShare and DHX user-authentication extensions by following steps 4 and 5.

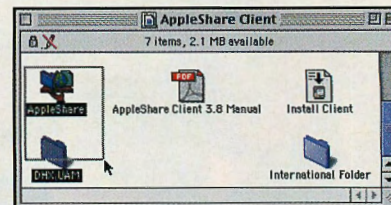
IF YOU'VE GOT MAC OS 8.5, you can install it all just by double-clicking Installer.



4 If You Can't, It's a Drag

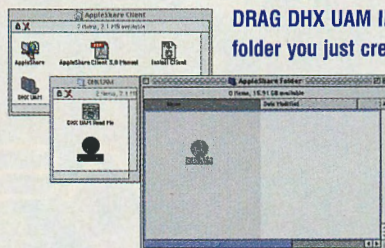
Drag the currently active AppleShare file out of the Extensions folder inside your System Folder and place it in the Trash. Drag the new AppleShare file from the AppleShare Client disk image into the Extensions folder.

THE APPLESARE CLIENT 3.8.3 DISK IMAGE contains two files you need: the new version of the AppleShare extension and the DHX UAM document.



5 One Last File

In the Extensions folder, create a new folder named AppleShare Folder (use *exactly* this name). Drag the DHX UAM file from the folder by that name on the AppleShare Client disk image into the newly created AppleShare folder. Once the copy process completes, choose Restart from the Finder's Special menu.



DRAG DHX UAM INTO the AppleShare folder you just created.

Set Up Your Disk

1 Sign Up

Log on to the Internet and point your browser to <http://itools.mac.com/WebObjects/Signup.wa/wa/SignUpOrIn>, then click Continue. Don't attempt to sign up by clicking the Free Sign Up button on the main iTools page of Apple's Web site. You'll get an instruction to download the iTools Installer, and this program refuses to work if it detects that you're not running Mac OS 9. To get to the sign-up page shown at right, you must use the special URL provided above.



APPLE WANTS YOU—sign up for your iDisk membership on this page.

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2 Fill Out the Form

Enter the information requested on the next few pages. When you get to the Save For Your Records page, print or save a copy of your account settings. Click Continue.

MAKE A PERMANENT COPY of your account settings by printing or saving this Web page.

iTools

Save for your records

You may want to print your account settings for future reference. We will also email them to your new Mac.com address.

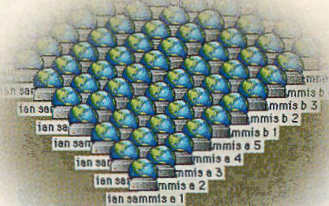
Member Name: alane_bowling
Password: [REDACTED]
Email address: alane_bowling@mac.com
Email server: mail.mac.com
SMTP server: (supplied by your Internet Service Provider)

Continue

3 Repeat If Necessary

Repeat these steps to create as many iDisks as you want, each capable of holding a maximum of 20MB.

MAKE AS MANY IDISKS AS YOU WANT—just use a different user name for each one.

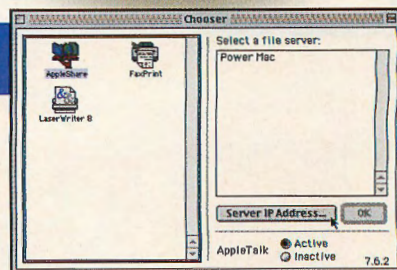


Mount Your iDisk

1 Make Your Choice

Open the Chooser from the Apple menu. Click AppleShare, then Server IP Address.

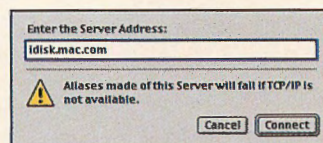
IF YOU'RE NOT USING MAC OS 9, you must mount your iDisk using the Chooser, at least initially.



2 Type the Address

In the Enter The Server Address text box, enter "idisk.mac.com" and click Connect.

THIS ADDRESS SHOULD CONNECT YOU to the server containing your iDisk.



3 Log In

Connect as a registered user by entering your member name and password in the appropriate text boxes, then clicking the Connect button.

ONCE YOU TYPE your name and password, Apple's server knows which iDisks to let you use.

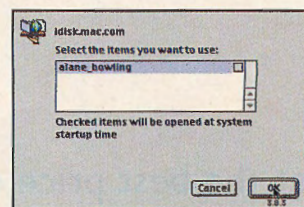


4 Pick the iDisk

Select the iDisk you want from the list, then click OK. After a brief pause, your iDisk appears on the desktop. At this point you can close the Chooser.

NOW THAT YOU'VE identified yourself, Apple's server knows this is your iDisk.

AND THERE IT IS—one iDisk, no system upgrade necessary.



Tips

Make an alias of the iDisk to bypass the Chooser the next time you need to use your iDisk. Or you can try iDisk Mounter 1.1, a free AppleScript from Christian Vick (<http://www.cooc.de/applescript>) that mounts your iDisk with a simple double-click by remembering your member name and password.

You can mount your iDisk as often as you need it, but you stay connected for a maximum of just 60 minutes at a time. After 50 minutes, you receive an alert that says you're running out of connection time. Another alert appears 3 minutes before the site disconnects you. All file copies in progress finish before your iDisk drops the connection, so you don't have to worry about losing data.

MacAddict's former Ask Us columnist, Owen W. Linzmayer (owenink@owenink.com), is the author of *Apple Confidential: The Real Story of Apple Computer, Inc.*, now available in English, German, and Japanese editions (No Starch Press, 1999). See what's in the Public folder of his iDisk by specifying the member name *owenink*.



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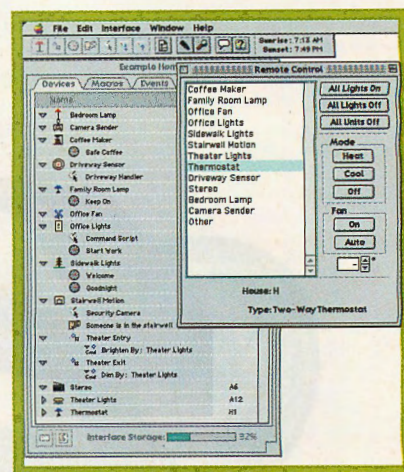
Q I am using Netscape Communicator as my Web browser, and I noticed that the bar across the top, right below the location box, has clickable links to sites. This seems like a very handy way to access my favorite sites, but I don't know how to add my own and remove the default Netscape sites. Please show me the way!

A The toolbar is an extremely handy way to get quick access to your favorite sites. Netscape Communicator and Microsoft Internet Explorer both offer this feature, but neither explains clearly how to customize the bar. The first thing to know is that you can remove the items already on the bar by simply dragging them to the Trash. As for adding items, there are two ways to go about it. The first is simply to go to the site you wish to mark, then drag the small Bookmark icon from the URL Location text box to the toolbar. This method is quick and easy, but the site's full title appears in the toolbar, and a long title gets cut off.

This is where the second option comes into play. Select Edit Bookmarks from the Bookmark menu (or from the Favorites menu in Internet Explorer) to see the Personal Toolbar Folder. Any bookmarks in this folder show up on your toolbar. Simply drag bookmarks into this folder, or—better yet—copy and paste items from other folders. You can also edit item names by highlighting them and selecting Get Info from the Edit menu. Before long, you'll have a truly personalized Web browser!

Q My wife and I are building a house, and the electrical contractor mentioned the possibility of computer-controlled lights and appliances. Of course, when we asked about using our Mac, he was clueless. I would love to automate my new house using our Mac. Is this possible?

A Yes, this is completely, positively, and absolutely possible! And believe it or not, it doesn't even cost that much. With your Macintosh and a few extra devices, you could be turning on lights, setting the thermostat, turning on the stereo, or starting the coffeemaker by remote control. You could even put everything on a timer. You can accomplish all this with a technology called X-10 (<http://www.x10.com>). This technology controls appliances and electrical devices by sending signals over your exist-



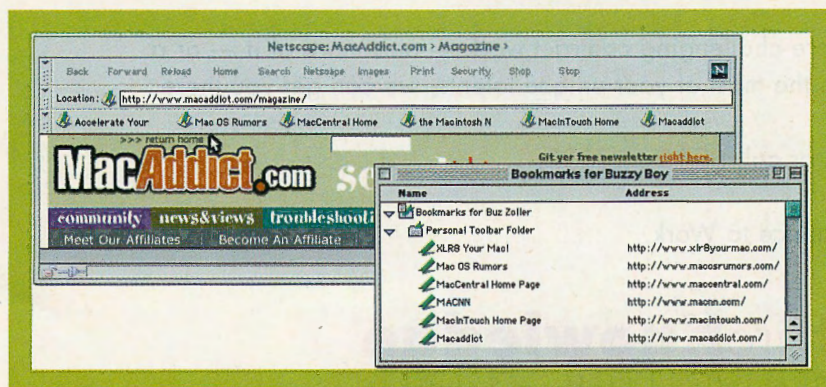
THINKING HOME is just one way to control your house using X-10 technology.

ing electrical wiring. The X-10 standard protocol sends a signal from a transmitter to a module.

How does your Mac come into play in this scenario? It tells the transmitter what signals to send to the modules (small, inexpensive boxes that connect to an appliance such as a stereo or lamp and control its function). The computer connects via a serial cable to a transmitter. This serial connection lets the computer control the transmitter; the transmitter then controls the modules.

The serial connection also makes X-10 remarkably platform independent. Quite a few Macintosh software packages can control X-10 systems, including Mouse House (<http://www.mousehouse.net>), XTension (<http://www.shed.com>), and Thinking Home (<http://alwaysthinking.com>). A great Web resource called Smarthome (<http://www.smarthome.com>) sells just about everything you need to get started. At this time, however, X-10 is a serial-only protocol—there is no USB version. This means if you want to use an iMac or USB Power Macintosh, you will need a USB-to-serial adapter such as the Keyspan twin-serial adapter (<http://www.keyspan.com>).

X-10 is a supercool technology and a great way to build the house of the future!



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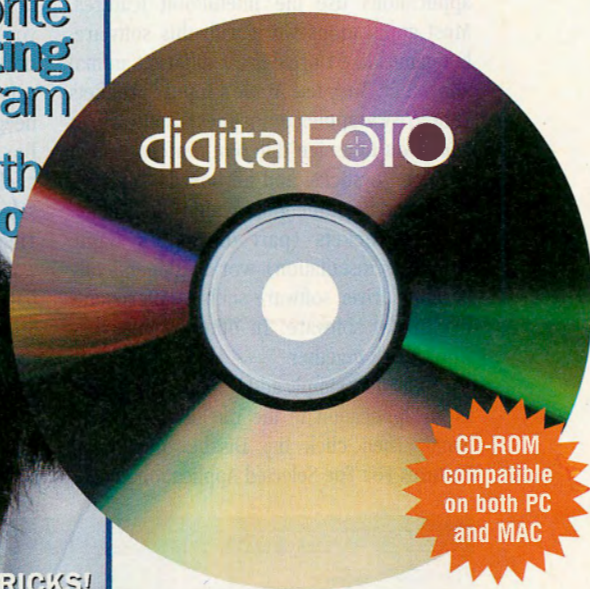
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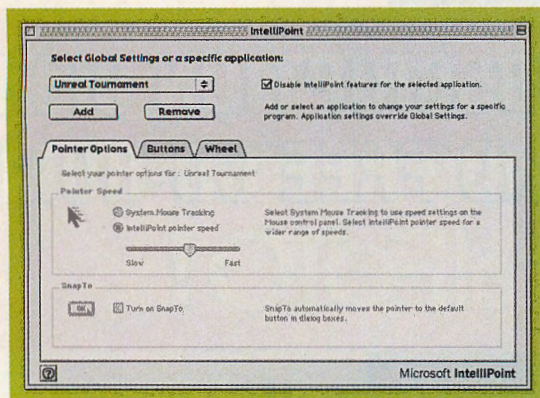


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THE MAGAZINE LEADING THE WAY IN DIGITAL PHOTOGRAPHY!



MICROSOFT'S INTELLIPOINT SOFTWARE lets you modify mouse settings for specific apps.

Q I recently purchased Unreal Tournament for my new G4, and it runs very well. I also just got a Microsoft IntelliMouse, which works fine, too. The problem is that I can't use my new Microsoft mouse with Unreal Tournament. My round Apple hockey-puck mouse works, but my fancy new mouse doesn't. Are they just incompatible?

A Fear not—this problem has an easy solution. The answer lies in the IntelliPoint software that controls your Microsoft mouse. This software lets you specify which applications use the IntelliPoint features. Most applications work with this software, but games like Unreal are a different animal altogether. They use Apple's Input Sprockets (<http://www.apple.com/games>) software to allow you to assign different devices—such as mice, joysticks, and keyboards—to perform certain functions within the game. Input Sprockets (part of Apple's Game Sprockets installation) work independently of other driver software such as Microsoft's IntelliPoint software. In other words, they won't work together.

To fix this, simply add Unreal Tournament as an application in the IntelliPoint control panel. Then click the Disable IntelliPoint Features For The Selected Application check-

box, and you're ready to go! In some instances, even this method may not allow some games to work with specific mice or joysticks. Then it's time to call in the big guns and download and purchase USB Overdrive (\$20, <http://www.usboverdrive.com>). This wonderful utility allows you to configure and use just about any USB input device with just about any program.

Q Microsoft Word 98 is a wonderful program and I really

like it, but sometimes it acts too invasive. Can you tell me *please* how to stop the Office Assistant from asking me if I want help typing a letter every time I type "Dear Whomever:" followed by a return? It's driving me nuts!

A Microsoft Office 98 really is a wonderful program, and part of what makes it so wonderful is its user friendliness. The problem, however, is that it really can be *too* user friendly. The Office Assistant is a case in point: This little animated character can accomplish just about any task you need to do in Office 98—and it tries to help even if you don't *need* any help. As you have noticed, this persistent creature isn't exactly easy to get rid of. To make it disappear, you need to locate the Office Assistant dialog box. You access this dialog box by Control-clicking the Office Assistant character and selecting Options from the pull-down menu. Then simply uncheck everything you don't want it to do. If you want Office Assistant back, you can still access it by choosing Microsoft Word Help from the Help menu.

Q My son and I have a new iMac. He also has a PC with Windows 98 with which he can access free telephone services. The site he uses does not currently offer access for Macs. Do you know of any sites offering this service that he can access with a Mac?

A The elusive Internet phone service harkens back to the days of Steve Wozniak's (<http://www.woz.org>) Blue Box and free long-distance phone calls. The truth is, this technology is very much in its infancy. Anyone who has tried it on any platform

Super Cool Tip

The Mac OS offers a cool click-and-a-half feature that allows you to zoom through directories. Double-click and hold on top of a folder or drive, and you get the Magnifying Glass icon. This opens any folder you drag it over. Cool enough, but here's an even cooler tip: Hold down the spacebar while you drag the icon, and the folder will open superfast—without a pause. Way cool!

knows it has a long way to go. The quality is barely comprehensible even on fast cable or DSL connections.

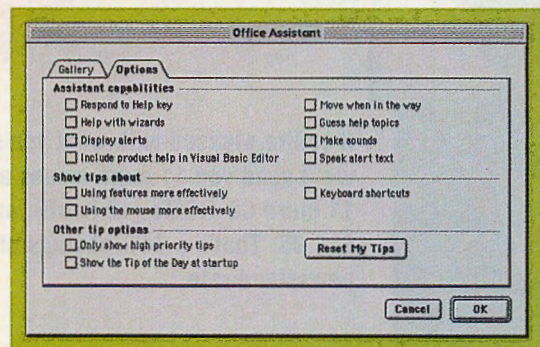
This is not to say it does not have possibilities—it does. As more and more households get outfitted with broadband Internet connections such as cable or DSL, the technology that allows voice over IP will expand and the quality will improve. Right now, the PC does have the edge, due to the sheer volume of the platform.

About a half-dozen sites and software packages are vying to be the Internet phone leader. One of the major software packages is Internet Phone by VocalTec (<http://www.vocaltec.com>). VocalTec has a Mac client that allows you to call a phone from your Mac. Unfortunately, this software is way behind its Windows counterpart, and VocalTec doesn't appear to be in any hurry to update it. Not only that, the service costs about \$40 a month, though computer-to-computer calling is free. This might be a nice option for calling other computers regardless of platform. Another possibility for computer-to-computer-only phone capability is Really Easy Voice (<http://www.reallyeasyvoice.com>). This cross-platform application works very well and features full Mac support.

The most promising option in this genre is I-Link (<http://www.i-link.net>). This company is currently testing a Web-based free phone service. The most popular PC Internet phone site is Dialpad (<http://www.dialpad.com>), but it is Windows-only at this point. The site does, however, mention that the company is working on a Mac version. Drop Dialpad a note expressing your interest in a Mac version.

As you can see, this technology is a work in progress. To keep up with the latest info, stay tuned to the Internet and Telecoms Convergence Web site (<http://itel.mit.edu>).

Buz Zoller is a technology support specialist for a school district in Texas. He is very proud of his new daughter, Courtney, born March 3, 2000!



LOVE IT OR HATE IT, you can control Office Assistant via this somewhat elusive dialog box.

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Apple Computer	1 Infinite Loop	www.apple.com	800-500-4862 #100	ifc-01
APS Technologies	1631 Deramus, P.O. Box 4987	www.apstch.com/	800-874-1341	102-103
ArtGrafix	15 Tech Circle	www.artgrafix.com	(800) 443-4421	199
BitHeadz Inc.	4400 Capitola Road # 202	www.bitheadz.com	888-870-0070	121
Castlewood Systems	7133 Koll Center Parkway suite 200	www.castlewood.com	925-461-5500	29
Charles Schwab	101 Montgomery Street	http://www.charleschwab.com/	1-800-225-8570	44-45
ClubMac	7 Hammond	www.club-mac.com	800-258-2622	110-111
Coast to Coast Memory	174 Willow Street	http://18004memory	800-4-Memory	122
Compu America	10435 Santa Monica Blvd.	www.compu-america.com	800-533-9005	126
Connectix	2955 Campus Drive	www.connectix.com	650-571-5100	83
Contour Design	354 North Broadway	www.contourdesign.com	1-800-462-6678	119
Data Memory Systems	24 Keewaydin Drive, Unit 5	www.datamem.com	800-662-7466	123
Deneba Software	7400 Southwest 87th Avenue	www.deneba.com	800-6-CANVAS	9
Dirt Cheap Drives	2201 Pine Drive	www.dirtcheapdrives.com	1-800-473-0962	116
Mac Professionals Book Club	401 Franklin Ave.	www.booksonline.com/mpbc		BRC
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Eritech International, Inc	213 N. Orange Street Unit C	www.eritech.com	800-808-6242	122
Extensis Corporation	1800 SW First Avenue Suite 500	www.extensis.com	503-274-2020	7
FVB Software	2750 El Camino Real	www.fvb.com	415-345-4300	23/85
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MacWarehouse	535 Connecticut Avenue	www.warehouse.com/ma	800-981-9192	104-105
MacZone	707 South Grady Way	www.maczone.com	800-304-0286	106-109
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MediaGuide	777 N. Santa Fe Drive	www.mediaguide.com	800-463-0686	127
MegaHaus	2201 Pine Drive	www.megahaus.com	800-475-7531	101
MicroMat Computer Services	8868 Lakewood Drive, Suite 273	www.micromat.com	800-829-6227	ibc
Microsoft	One Microsoft Way	www.microsoft.com/mac	(425)882-8080	20-21
Microsoft	One Microsoft Way	www.microsoft.com/mac	(425)882-8080	52-53
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Other World Computing	224 West Judd Street	www.macsales.com	800-275-4576	112-113
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PrePress Consolidated Color, Inc.	12909 SW 133rd Court	prepressmiami.com/ok	1-888-402-2259	127
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48GB	60MB/min	HP C159AI	\$549
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12.24GB	120MB/min	HP DDS-3 C155AI	\$719
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APS ST 9.1GB Ultra160 LVD	10000	369.95	439.95
APS I 18GB Ultra160 LVD	7200	399.95	469.95
APS ST 18GB Ultra160 LVD	7200	399.95	469.95
APS I 18GB Ultra160 LVD	10000	629.95	699.95
APS ST 18GB Ultra160 LVD	10000	599.95	669.95
APS ST 36GB Ultra160 LVD	10000	899.95	969.95
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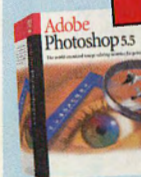


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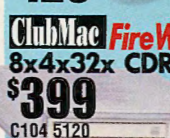
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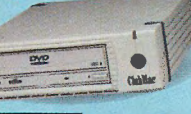
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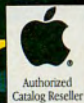
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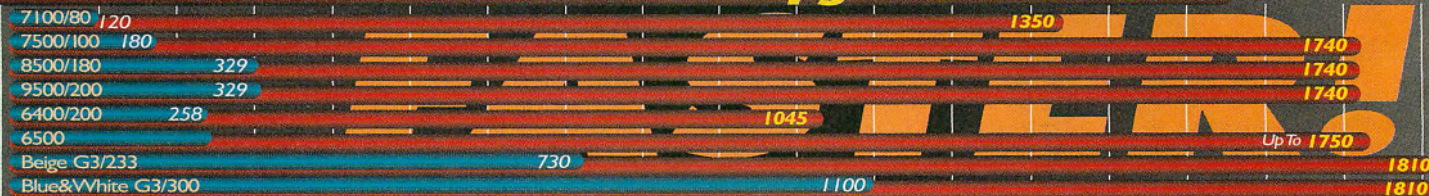
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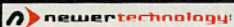


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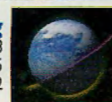


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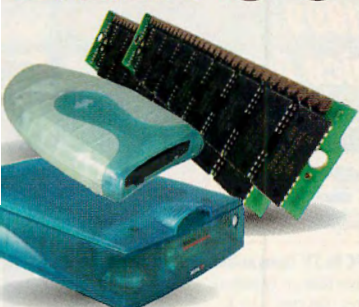
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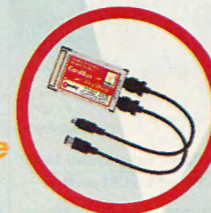
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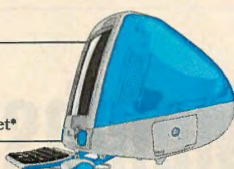
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Coverage from the Mouths of Babes

The following are quotes taken from several MSNBC stories after U.S. District Judge Thomas Penfield Jackson gave his ruling in the Microsoft antitrust trial.

"The predatory course of conduct that Microsoft has pursued since June of 1995 has revived the dangerous probability that Microsoft will attain monopoly power in a second market."

—THOMAS PENFIELD JACKSON, U.S. DISTRICT JUDGE

"Today's important decision confirms what almost everybody in the world knows—Microsoft is a monopoly that has acted illegally."

—SCOTT MCNEALY, SUN CEO

"Innovation will continue to be our number one priority."

—BILL GATES

"This wave of prosperity is tied unequivocally with Microsoft, and if you take down Microsoft, the economy is assured to fall."

—CARY WHITE, MIS DIRECTOR AT
RELIANT GENERAL INSURANCE SERVICES

"People have been calling since last summer, asking what we think. What planet are people living on that didn't know they were guilty?"

—BOB YOUNG, RED HAT CEO

News Stories We Thought We Read Somewhere...

AOL Accidentally Merges with Sears

Internet megacorporation may end up accidentally selling products

FEELGOOD, MASS.—A series of depraved, drunken board meetings at AOL headquarters has led to an unfortunate merger between AOL and retail chain Sears.

"Come see the softer side of spam" is the combined company's new slogan, revealed yesterday in a joint announcement by AOL and Sears officials. AOL plans to

leverage Sears assets by charging AOL fees to Sears credit accounts and offering instant messaging of Sears customer-service staff.

Rejected slogans for the new company include: "A lifetime guarantee of unsolicited porn!" and "We own your ass now, so get used to it." AOL's stock took a plunge immediately after the announcement due to investor fears that AOL might actually sell real products.

MacAddict Corrections

+ In the June issue of *MacAddict*, we published the all-how-to issue. What we meant to publish was the all-halitosis-treatment issue, but we discovered Altoids. We're sorry, but our breath is curiously fresh.

+ While trying to discover fire, Jenifer Morgan's distant ancestor Grunk smashed her thumb with a big piece of flint. She felt just terrible.

+ On page 237 of the April issue, we reported that Mac OS 9.0.4 had shipped. We meant to say that the whole tech stock thing was a fluke and the bubble is about to burst. Many investors are very, very sorry.

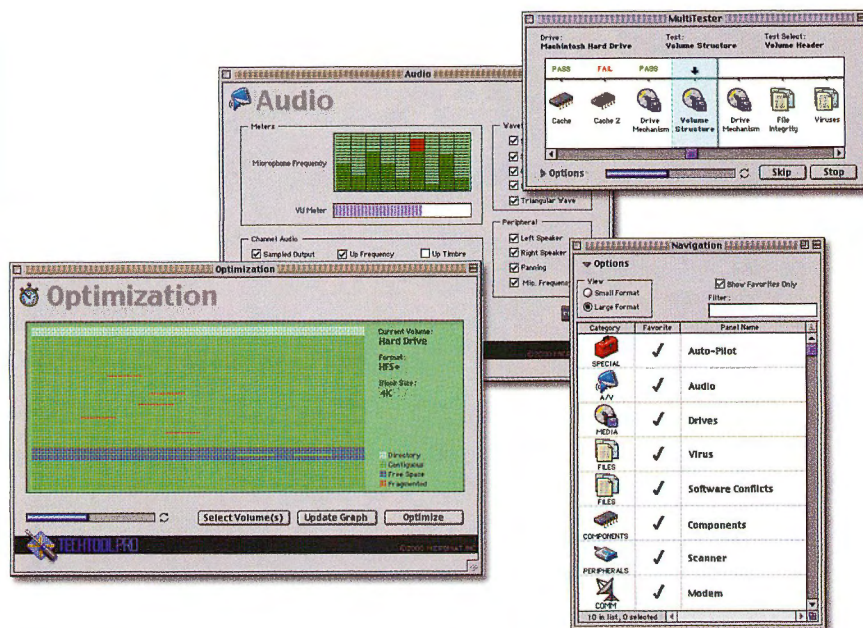
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BY CHUCK DOWNS

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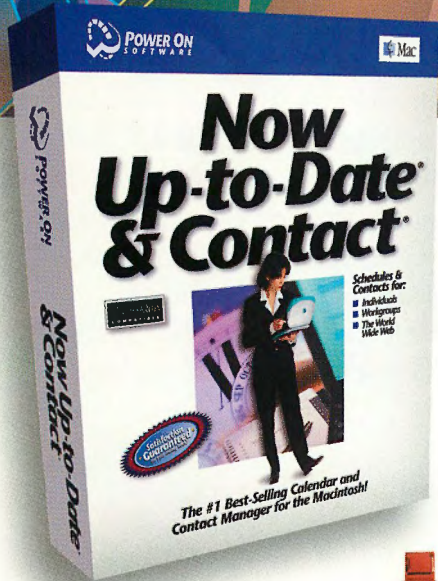


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